

SUPPLEMENT TO FINAL STATEMENT OF REASONS

OAL File No. 2009-0209-03 S

Pursuant to Administrative Procedures Act Government Code Section 11349.4

Department of Water Resources
Title 23 Division 2 Chapter 2.7 Sections 490-495
Model Water Efficient Landscape Ordinance

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A. SUPPLEMENT TO FINAL STATEMENT OF REASONS

This supplement to the Final Statement of Reasons provides additional information to the rulemaking record, pursuant to Administrative Procedures Act Government Code Section 11349.4, in response to the Decision of Disapproval of Regulatory Action by the Office of Administrative Law. Consistent with Government Code Section 11347.3, the Department of Water Resources (the Department) has made a copy of its file of rulemaking in this matter available for public inspection.

B. IMPORTANT DATES OF NOTICES AND RULEMAKING ACTIVITIES

February 9, 2009	Rulemaking package 2009-0209-03 S submitted to OAL
March 25, 2009	OAL returns Decision of Disapproval
May 11-26, 2009	15-day public comment period
July 29, 2009	Regulation re-submitted to OAL

C. CHANGES OF TEXT TO REGULATION (NARRATIVE)

The changes made to the text of the Ordinance were necessary to either;

- (1) respond to OAL's Decision of Disapproval, April 01, 2009; or
- (2) accommodate public comments received; or
- (3) clarify provisions and definitions of terms; or
- (4) specify the requirements under the statute (Government Code, Section 65996 (a)-(m)).

The following terms are used to describe the progression of changes made to the regulation text between March 25, 2009 and June 30, 2009:

- **Noticed text** refers to the proposed text of regulations noticed on May 08, 2009.
- **Final text** refers to the final text of regulations provided to the Office of Administrative Law July 29, 2009.

Each narrative below describes the progression of changes made to the regulation text and supplements what was previously published in the Final Statement of Reasons. The narratives follow the regulation text by section number (i.e., Section 490 Purpose, Section 491 Definitions, etc.).

Non-substantive changes, such as spacing, grammar and punctuation, were made to the modified text but not included in the narratives below.

Section 490 Purpose

In the noticed text;

- No noticed changes

In the final text;

- 490 (a) (5) text was modified to change the word “shall” to “should”. This was done in response to public comment and to more accurately reflect the legislative findings.

Section 490.1 Applicability

In the noticed text;

- (4) added section numbers to include all applicable sections for existing landscapes
- Subsection (5), changed section numbers to better reflect applicability
- (4) added language to specify the exemption for botanical gardens

In the final text;

- Above changes were incorporated into the document

Section 491 Definitions

In the noticed text;

- (h) “common interest development” changed reference to civil code section to better reflect pertinent code;
- (i) “controller” changed language to clarify definition;
- (x) “invasive plant species” introduced new term and definition
- (cc) “landscape architect” changed code reference from Government Code to Business and Professions Code;
- (ee) “landscape contractor” deleted a phrase referring to Business and Professions Code, reference was not necessary;
- (qq) “new construction” introduced new term and definition, done to improve clarity for Applicability section;
- (tt) “overspray” deleted phrase in definition of overspray, phrase was unnecessary and overly specific; added word “irrigation” to improve clarity

- (vv) “permit” clarified definition;
- (ww) “plant factor” corrected date of publication
- (zz) “rain sensor” corrected grammatical error;
- (ddd) corrected the referenced section number;
- (rrr) “watering window” introduced new term and definition to improve clarity;
- (sss) revised definition of “WUCOLS” to more accurately reflect publisher of the document.

In the final text;

- re-ordered into correct alphabetical sequence the following terms: “conversion factor”, “certified landscape irrigation auditor”, “check valve”, “certified irrigation designer”, “pervious” and “permit”.
- (h) “controller” modified the definition and re-named the term to (b) “automatic irrigation controller” to improve clarity. Change based on public comment.
- (j) “drip irrigation” modified the definition to reflect true measurements of flow rate. Added language regarding low volume irrigation to further define drip irrigation, which is a subset of low volume irrigation.
- “effective precipitation” removed “used by plants” and replaced with “becomes available for plant growth”. This revised definition is based on the definition used by American Society of Agricultural and Biological Engineers and the Irrigation Association.
- (n) “established landscape” did not incorporate noticed change of “soil” to “site” based on public comment that “soil” was more appropriate.
- (o) “establishment period of plants” added language to indicate the typical length of time for this period.
- (u) “homeowner provided landscaping” expanded the definition of to distinguish speculative homes from owner-occupied. Change based on public comment.
- (x) “invasive plant species” modified the definition to better reflect terminology used by recognized experts in this field. Change based on public comment.
- (cc) “landscape architect” incorporated change from noticed text
- (ee) “landscape contractor” incorporated change from noticed text
- (pp) “mulch” added the word “compost” to list of acceptable mulches to expand possible choices available to landscape professionals.
- (qq) “new construction” incorporated change from noticed text and added examples of landscapes
- (tt) “overspray” incorporated change from noticed text
- (uu) “permit”(formerly (vv)) incorporated change from noticed text
- (ww) “plant factor” incorporated change from noticed text
- (ddd) “reference evapotranspiration” incorporated change from noticed text
- (eee) “rehabilitated landscape” added “equal to or” before “greater than 2500 sq ft” to include landscapes that are exactly 2500 square feet, changed the word “occur” to “completed”
- (rrr) “watering window” incorporated change from noticed text
- (sss) “WUCOLS” incorporated change from noticed text

Section 492.4 Water Efficient Landscape Worksheet

In the noticed text;

- (b)(3) corrected grammatical errors
- (c)(1) introduced explanations of terms in the MAWA calculation

In the final text;

- (a)(2) included a more complete reference to Reference Evapotranspiration Zones map
- (b)(3) incorporated change from noticed text
- (c) changed language to reflect new definition of “automatic irrigation controller”
- (c)(1) incorporated change from noticed text
- (c)(1) added parentheses to MAWA calculation, based on public comment, to clarify the order of mathematical operations
- (c)(1) added words “including SLA” to the description of LA (Landscape Area), to clarify that the square footage of SLA is to be included in LA when calculating MAWA.
- (c)(1) further clarified explanation of terms, based on public comment
- (d) further clarified explanation of terms, based on public comment
- (d)(1) sentence structure improved
- (d)(1) and (2) modified column headings in table to incorporate the abbreviation “HA”
- (d)(2) added parentheses to MAWA calculation, based on public comment, to clarify the order of mathematical operations

Section 492.6 Landscape Design Plan

In the noticed text;

- (a)(1)(A) modified text to clarify intent
- (a)(1)(A) 2, improved sentence structure by deleting word “species”
- (a)(1)(B) specified exemption and improved sentence structure
- (a)(1)(F) rephrased this provision stating that invasive plants are discouraged, rather than previous language which said “...shall be avoided, especially near parks...”. This modification clarifies the intent. This change was based on comments from OAL decision.
- (a)(1)(G) removed reference to Civil Code. Reference was not correct and no reference is required.
- (b) removed reference to “standard industry practices”. There is no known standard. Revision made based on comments from OAL decision.
- (b)(13) clarified authorized signatures for design plan and included specific references to code
- Note: deleted incorrect parts of authority and reference citations

In the final text;

- (a)(1)(A) incorporated change from noticed text
- (a)(1)(A) 2 incorporated change from noticed text
- (a)(1)(A) 3 added a recommended selection criteria, based on public comment
- (a)(1)(A) 3 through 5 re-numbered
- (a)(1)(B) incorporated change from noticed text
- (a)(1)(F) incorporated change from noticed text and added word “strongly” to strengthen recommendation, based on public comment.

- (a)(1)(G) incorporated change from noticed text
- (b) incorporated change from noticed text
- (b)(13) incorporated change from noticed text and added word “bear” to improve sentence structure, based on public comment.
- Note: incorporated change from noticed text

Section 492.7 Irrigation Design Plan

In the noticed text;

- changed “specifications” to “recommendations”, which is a more accurate word for this provision
- (a)(1)(D) modified sentence structure to improve clarity
- (a)(1)(N) changed “specifications” to “recommendations”, which is a more accurate word for this provision
- (a)(1)(O) modified sentence to improve clarity and accuracy
- (a)(1)(R) removed unnecessary modifier and corrected punctuation
- (b) removed reference to “standard industry practices”. There is no known standard. Revision made based on comments from OAL decision.
- (b)(7) “authorized signatures” clarified authorized signatures for design plan and included specific references to code. Revision made based on comments from OAL decision.
- (b)(7) added “irrigation consultant” as an authorized signatory to design plan

In the final text;

- incorporated change from noticed text
- (a)(1)(B) revised sentence to improve clarity and maintain consistency with the definition of “automatic irrigation controller”
- (a)(1)(D) incorporated change from noticed text
- (a)(1)(K) added the words “at a minimum” to clearly indicate that this was the minimum criteria
- (a)(1)(N) incorporated change from noticed text
- (a)(1)(O) incorporated change from noticed text
- (a)(1)(R) incorporated change from noticed text
- (a)(1)(S)1 deleted the word “overspray” because overspray is allowable on permeable surfacing
- (a)(2)(F) deleted obsolete reference to inspections that are no longer required and replaced with irrigation audits, which are required
- (b) incorporated change from noticed text
- (b)(7) incorporated “authorized signatures” change from noticed text
- (b)(7) did not incorporate “irrigation consultant” change from noticed text, based on public comment

Section 492.8 Grading Design Plan

In the noticed text;

- (a)(3) deleted references to specific code and specific professional titles authorized to sign plans. Revision made based on comments from OAL decision.

In the final text;

- (a)(3) incorporated change from noticed text with modifications. Added “shall bear” to improve sentence structure and changed “required” to “authorized” to improve accuracy.

Section 492.9 Certificate of Completion

In the noticed text;

- (a)(1) through (6) re-numbered and re-ordered to consolidate project information
- (a)(6) added further explanation on procedure for submitting soil analysis report

In the final text;

- (a)(1) through (6) incorporated change from noticed text
- (a)(2)(A) added requirement to submit “as-built” drawings as needed, based on public comment. Documents that describe changes made in the field are routine practice. This modification to the Ordinance does not impose an extra burden upon the applicant to perform an action not ordinarily done. Rather, this modification only requires that these routine documents are submitted with the Certificate of Completion.
- (a)(6) incorporated change from noticed text

Section 492.10 Irrigation Scheduling

In the noticed text;

- (a)(2) added an allowable deviation from watering window to accommodate system maintenance
- (a)(3) corrected punctuation errors

In the final text;

- (a)(1) modified text regarding irrigation scheduling. Previous text had the effect of unintentionally limiting the types of controllers allowed. Modification based on public comment.
- (a)(2) incorporated change from noticed text
- (a)(3) incorporated change from noticed text
- (a)(3) modified language to reflect the new definition of “automatic irrigation controller”
- (a)(4) added the word “automatic” reflect new definition of “automatic irrigation controller”

Section 492.11 Landscape and Irrigation Maintenance Schedule

In the noticed text;

- No noticed changes

In the final text;

- (b) added an allowable deviation from watering window in order to accommodate special situations. This is a restatement of a provision found in section 492.10. This addition is based on public comment.

Section 492.12 Irrigation Audit, Irrigation Survey and Irrigation Water Use Analysis

In the noticed text;

- deleted reference to Irrigation Association Training Manual. In response to OAL decision noting that the manual was a draft not to be used for regulatory purposes.
- (a)(b) re-numbered

In the final text;

- incorporated change from noticed text
- (b) incorporated change from noticed text

Section 492.14 Recycled Water

In the noticed text;

- (b) replaced “agency” with “purveyor” to be consistent throughout documents
- (d) added a sentence re-stating a provision from Section 492.4(b)(4) regarding ETAF and recycled water

In the final text;

- (b) incorporated change from noticed text
- (d) incorporated change from noticed text

Section 492.15 Stormwater Management

In the noticed text;

- (b) add the word “applicable” for clarity
- (c) added “Rain gardens and other landscape features that increase rainwater capture and infiltration are recommended”. Added in response to AB 2717 recommendations as a practice to increase stormwater retention.

In the final text;

- (b) incorporated change from noticed text
- (c) incorporated change from noticed text and added additional language to clarify intent, modification based on public comments.

Section 492.17 Environmental Review

In the noticed text;

- deleted statement indicating exemption from CEQA. This statement was not necessary and served no regulatory purpose. Deletion based upon comments from OAL decision.
- (a)(b) re-numbered

In the final text;

- incorporated change from noticed text
- (a)(b) incorporated change from noticed text

Section 493 Provisions for Existing Landscapes

In the noticed text;

- Added authority and reference citations

In the final text;

- Incorporated change from noticed text

Section 493.1 Irrigation Audit, Irrigation Survey and Irrigation Water Use Analysis

In the noticed text;

- (a)(b) Re-numbered and re-organized this section in response to OAL decision.
- deleted unnecessary language

In the final text;

- (a)(b) Incorporated change from noticed text
- Incorporated change from noticed text
- (a)(1) modified text to provide clearer direction on results of required programs. Based on public comment.
- (a)(2) modified text to provide clearer direction on results of required programs. Based on public comment.

Section 493.2 Water Waste Prevention

In the noticed text;

- deleted “cities and counties” and replaced with “local agencies” to maintain consistency throughout the document
- (a)(2) added language to improve clarity
- (b)(1)(2) added language that accommodates advances in technology and design

In the final text;

- Incorporated change from noticed text
- (a)(2) Incorporated change from noticed text
- (b)(1)(2) Incorporated change from noticed text
- added the words “and runoff” to maintain consistency with (b)(1)

Section 494 Effective Precipitation

In the noticed text;

- No noticed changes

In the final text;

- Brackets and parentheses added to MAWA equation to clarify order of operations, modification based on public comment

Section 495.2 Appendix B

In the noticed text;

- Deleted Project Information title and table. This appendix is the Water Efficient Landscape Worksheet, not the Project Information sheet.
- Added title “Section B Water Budget Calculation” for improved organization
- In Effective Precipitation, deleted a subjective phrase
- Added parenthetical phrase (25% ...) into the sentence
- In Section B2, added “for Calculating ETWU” title of Hydrozone Table to increase clarity

CERTIFICATE OF COMPLETION

- Deleted unnecessary instruction
- Renamed and re-ordered worksheets to reflect the text of the Ordinance, Section 492.9
- Modified Property Owner statement to specify which documents are to be received
- Added Property Owner signature and date to Part 1
- Questions at the bottom of Part 1 have been modified to statement format – thereby providing the needed information to the local agency
- Section D Property Owner has been deleted because of redundancy found in Part 1 Project Information Sheet
- “Local Agency Use Only” table was deleted in its entirety. This form is unnecessary and will be of limited usefulness to local agencies which will have their own forms.

In the final text;

- All above listed changes incorporated from the noticed text

SECTION A

- Hydrozone Information table modified to remove unnecessary information
- Hydrozone Information table legend – removed unnecessary items

SECTION B

- Added parenthesis to MAWA and Effective Precipitation calculations to clarify order of operations
- Added the abbreviation, ETAF, to maintain consistency throughout the document
- Added the words “per year” and “to gallons per square foot” to maintain consistency throughout the document

HYDROZONE TABLE FOR ETWU

- Changed column titles to include “HA”, which is an abbreviation explained above the table

CERTIFICATE OF COMPLETION

- Corrected the title of a document in Property Owner Statement

D. REVISED RESPONSES TO COMMENTS

The comments in this section are from the initial 45-day comment period. This section is the revision of those responses. OAL's decision of disapproval (OAL File Number 2009-0209-03 S) stated that the Department's responses to some comments did not explain the reasons for rejections, as required by Government Code section 11346.9 subdivision (a)(3).

The table below lists all the comments specifically mentioned in OAL's decision with the corresponding comment number. * From OAL Decision of Disapproval

Comment Number	Commenter Number*	Original FSR page*
G56	34	47-48
G57	42,48,56	48
G58	44	48
G59	45	49-50
G60	50	49-50
G61	54	49-50
G89	44	64
G91	67	64
G92	50,67	65
G93	57	65
G94	44	65
G95	74,114	65
G96	20	66
G97	67	66
G98	44	66
G99	44	66
G100	44	66
G101	44	67
G102	85	67
G103	44	67
G104	163	67
G105	150	68
G106	44	68
G107	90	68
G108	44	68
G109	44	68
G110	25	68
G135	44	75
G136	67	75
G137	85	75
G138	44	76
G144	44	77
G145	44	77
G146	59	77
G147	79	77

Revised Responses to Comments

Overall Comments

G1 Summary of Comment 25:

A commenter stated the “Model Ordinance document is so cumbersome and prescriptive that it will be virtually unenforceable. The depth of applicability and the overly complicated methods of implementation which includes so many forms, certifications and documents would create an unnecessary burden on applicants and agencies trying to manage and implement these requirements. Doubling or tripling the time and effort required to submit documents is not going to promote water conservation.”

DWR Response: Reject in parts and accept parts. The provisions of the Model Ordinance are largely unchanged from the original Model Ordinance, and the sample forms and documents required and contents of the documents have been simplified. To make compliance less onerous, some requirements have been eased. For instance, compared with the original Model Ordinance, Water Conservation Concept Statement, Section 492 (c) (1); Estimated Applied Water Use, Section 492 (c) (3); and Landscape Irrigation Audit Schedule, Section 492 (c) (9) have been deleted; Estimated Total Water Use due to precipitation, Section 492 (c) (4) (B) has been made optional; and Maintenance Schedule, Section 492 (c) (8) and Certification, Section 492 (c) (12) have been consolidated and renumbered 495.3. Although the Ordinance has been updated as required by the law to achieve greater water conservation, DWR has attempted to strike a balance between compliance and practical application. Even so, some updated provisions will require greater attention to planning, design, implementation, and maintenance.

G2 Summary of Comment 34:

A commenter stated the “when AB 325 was enacted, it was haphazardly enforced and so in many areas little improvement has been realized. It seems that this current review process is driven strictly by AB 1881, and precious little consideration was given to whether the statute was flawed, or whether the enforcement process was flawed. It is clear to me as one who has been managing public agency landscape infrastructure for 15 years that the goals established in AB 325 were more than adequate to set a fairly reasonable goal for water managers. Meeting the AB 325 targets are a challenge in the real world where irrigation valves stick on occasionally, vandals mess with equipment etc. I find no allowance made to allow the system to be tested via turning on the water for two minutes per station weekly, something that is essential to sustain the high level of efficiency that the statute has as a stated goal.”

DWR Response: Reject. DWR must adhere to the provisions of the statute. The California Urban Water Conservation Council (CUWCC) Landscape Task Force and the associated Work Groups studied the effectiveness of the AB325 Ordinance and made forty three recommendations to improve and update the Water Efficient Landscape Ordinance over the existing Ordinance. Along with statute, the Department considered these recommendations when drafting the update of the Model Ordinance. The Department initiated a stakeholder process on September 28, 2007 and conducted approximately thirteen (13) stakeholder workshops or meetings prior to the Notice of Proposed Rulemaking which was published in the California Regulatory Notice Register on February 8, 2008. The input of the Task Force, Work Groups and Stakeholders comprise the knowledge and expertise of more than 100 individuals with experience in design and maintenance

of landscapes. Regular testing and maintenance of the irrigation system is recommended. DWR conducted a survey of local agencies to determine the extent of implementation of AB 325. This was required by the statute. The results of this survey have been considered by DWR and will assist in formulating outreach to local agencies.

DWR recognizes the importance of system testing and maintenance. This is reflected in the requirement for a Landscape and Irrigation Maintenance Schedule with the Certificate of Completion as well as a revision to the allowable watering window allowing an exemption for maintenance and system testing.

Furthermore, designing an efficient landscape both in terms of plant selection, irrigation equipment choices and scheduling are the major factors that will determine whether a landscape can be maintained under the MAWA. These factors are not affected by malfunction or vandalism.

G3 Summary of Comment 45:

A commenter stated the “technical nature of the model ordinance makes understanding the requirements extremely difficult. In order to gain greater acceptance of and compliance with the ordinance, the ordinance should be drafted in a more simplistic fashion.”

DWR Response: Accept in part and reject in part. To the extent possible given the prescriptive nature of the statute, DWR has simplified the Model Ordinance. The basic provisions written in the existing regulation are largely unchanged, however many of the provisions have been simplified or clarified. The Ordinance does retain technical aspects to maintain accuracy and ensure that the best and most appropriate advances in irrigation technology and management techniques are utilized.

G4 Summary of Comment 55:

Commenter stated that our “most significant concern is the post-installation enforcement that this ordinance would require. Tracking the properties, filing the documentation, conducting the five-year audit, etc, would be labor intensive and require additional staffing. This would be an unfunded mandate.”

DWR Response: Accept in part and reject in part. DWR has simplified as much of the Ordinance as possible without compromising the underlying statutory requirements. The post-installation provisions written in the existing regulation have been modified to allow greater flexibility to local agencies. The requirement for audits every five years has been deleted and has been replaced with the following language:

492.12 (a)(2) the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

Cooperation with local water purveyors for some of these tasks is recommended to reduce costs and because water agencies may already have water budgeting and enforcement programs in place.

G5 Summary of Comment 63:

A commenter listed approximately nine elements for cities to effectively implement the Model Ordinance: develop a localized language “at least as effective” for water conservation as the model ordinance, and then go through procedures to adopt the ordinance; adopt new water conservation policy guidelines in the General Plan; modify Zoning Code Design Guidelines; modify Standard Conditions of Approval for all related entitlement, discretionary or administrative permit actions; modify the citywide Jurisdictional Urban Runoff Management Plan and the template for site-based Water Quality Management Plans (WQMPs) that define post-construction

water management and maintenance requirements for projects meeting certain land use and threshold size requirements under our NPDES permits; train or hire staff or consultants to acquire the necessary expertise for planning and permitting reviews and construction inspections; develop a Memorandum of Understanding with the local retail water purveyor (which is a completely separate entity from the city government) for plan review procedures and access to water consumption data; and/or for delegation of authorities and responsibilities; develop a system for implementing the audits on existing developments, including a mechanism for identifying and measuring landscaped areas on all sites including single-family homes that may have over 2500 of irrigated landscaping; and then tracking their water consumption even though an unknown but probably large proportion of the water would be consumed indoors; and Consider adoption of an enforcement mechanism for wasted water.

DWR Response: Accept in part. This list of nine elements will be considered after the rulemaking process for inclusion into the Department's local agency and public outreach efforts. As part of the Department's outreach, DWR will be developing a guidebook and conducting several workshops throughout the state to assist local agencies in implementing a water efficient landscape ordinance.

G6 Summary of Comment 64:

A commenter stated the "while we agree that there is a need to conserve water use in the landscape, I feel that the Model Ordinance as currently written is very complex, very costly, very time consuming and is doomed to crash under its own weight. Nobody wants to see this happen. In many cases, the current draft of the Model Ordinance conflicts with many of the local agency ordinances that are already in place. These conflicts create a duplication of the designer's work effort. What I believe needs to happen is for the Model Ordinance to be rewritten to provide an end result in terms of maximum applied water application (MAWA) and not how to reach MAWA. Of course, information on estimated water use (EWU) will also need to be provided by the designer. There could be some simple rules like no water run-off, Smart controllers, develop and identify hydrozones, etc. The designer should determine the best approach to reach the end goal to ensure the EWU is less than the MAWA. This can be accomplished without direction from the Model Ordinance on how the results should be achieved. I realize that my previous comments are an over simplification of a large issue, but not much more is needed to achieve the results desired."

DWR Response: Accept in part and reject in part. DWR has simplified as much of the Ordinance as possible without compromising the underlying statutory requirements. DWR must implement all of the statutory requirements which mandate including specific standards while encouraging certain conduct to conserve water. DWR has attempted to draft a regulation that is flexible but that includes the provisions that the law requires. Local agencies are free to adopt their own ordinance as long as it is at least as effective as the state Model Ordinance, a determination to be made by the local agency. The statute states that nothing in the Model Ordinance is to conflict with or duplicate local landscape ordinances. Designers, therefore, will only comply with either a local ordinance or the adopted Model Ordinance.

G7 Summary of Comment 65:

A commenter stated the "from the very beginning, the best minds in California water management were never involved in the process of AB 2717 through the early stages of AB 1881. It seemed as if committees of people were created without any real thought or semblance of who should have been on those original committees. As there were many fine individuals involved in AB 2717, there were many exceptional people who were omitted from the process. Only now are we starting

to see problems as recognized in AB 1881. It seems as if there was a need to create extensive and complicated rules that only created more rules that ultimately place the responsibility of these many layers onto public agencies that do not have either the money or manpower to police these rules. In the end, none of this will realize the ultimate result...water savings. The great state of California has great imbalances from urban to rural to agricultural counties that include water agencies of all shapes and sizes. Some are poor and some are super-rich. The state must consider these discrepancies with any plan. Whatever the [Department] does, don't follow through with the current Model Ordinance. It over-analyzes without scientific support and lacks the ability to follow-through to ensure manageability.”

DWR Response: Reject. Members of AB2717 Task Force and Technical Workgroups represented a wide range of stakeholders including California water managers, academics and landscape professionals. DWR reached out to many of these same stakeholders during the initial drafting and many of these same stakeholders commented about the Model Ordinance during the public comment period. DWR believes it convened some of the best minds and people on these issues. The statute contains specific mandatory requirements that DWR must include in the Model Ordinance. The legislature directed the statute at local agencies because local agencies make and enact land use decisions in their jurisdictions. It is local agencies that permit and inspect construction activities. Cooperation with water purveyors is highly recommended because water purveyors often have landscape programs already in place. Local agencies can develop their own local ordinance that is as at least as effective as the Model Ordinance.

G8 This response was not revised.

G9 Summary of Comment 73:

A commenter stated “I believe the Model Ordinance may be written better. It also appears cumbersome to administer. It relies on unproven assumptions. It puts the entire burden of water savings on the local agencies, developers, residential homeowners, commercial owners and landscape architects to do their part in the design and construction of a project. The Model Ordinance does not look at the financial burden and additional time required for project implementation.”

DWR Response: Reject. The basic provisions written in the existing regulation are largely unchanged. The technical requirements in the Model Ordinance are not based on unproven assumptions but are based on data available in scientific literature and advances in irrigation equipment and management methods. By starting out with appropriate landscape and irrigation system design in regards to plant choices and irrigation equipment, water efficient landscapes are more cost effective than those landscapes that will require retrofit at some later date. It is appropriate to place these responsibilities onto those who construct new and rehabilitated landscapes and local agencies because they have the power of land use decisions. Cooperation with water purveyors is highly recommended because water purveyors often have landscape programs already in place.

G10 Summary of Comment 78:

A commenter stated that “parts of the [Model] Ordinance are overly specific, either limiting options to meet the intent or demanding difficult or unworkable parameters to be used” and recommended “setting the goals, not the manner, and require water budget based tiered rate schedules to penalize over users which effectively audits both new and existing users each month.”

DWR Response: Reject. DWR must adhere to the provisions of the statute. Local agencies can establish their own goals and still meet the intent of the statute. Provisions in the draft update have been simplified in response to comments but specific provisions are added as required by the enabling statute. Local agencies are free to develop local or regional ordinances that will fit their particular situations and that are as at least as effective as the Ordinance. While tiered rates are shown to help deter wasteful water use, the Department has no authority over setting tiered rate structures.

G11 Summary of Comment 82:

A commenter stated the “my goal, as I would assume is yours’ is to make water conservation both efficient, easy to understand and practical. I don't believe that this is being accomplished by the proposed [Model] Ordinance.”

DWR Response: Accept in part and reject in part. DWR must adhere to the provisions of the statute. In light of those requirements, DWR has attempted to simplify and revise the Ordinance where possible. The basic provisions written in the existing regulation are largely unchanged; however, many provisions have been simplified in response to public comments. DWR will conduct workshops to assist the local agencies and water suppliers and the public to implement the Ordinance.

G12 Summary of Comment 83:

A commenter stated the “much of the proposed [Model] Ordinance is constructive and appropriate. However, we strongly feel that specific aspects of the Ordinance are overly prescriptive and complicated. For the [Model] Ordinance to be successful it must be simplified, especially in the application process.”

DWR Response: Accept in part and reject in part. DWR must adhere to the provisions of the statute. In light of those requirements, DWR has attempted to simplify and revise the Ordinance where possible. The basic provisions written in the existing regulation are largely unchanged; however, many provisions have been simplified in response to public comments.

G13 Summary of Comment 85:

A commenter stated “CLCA does not believe that cities and counties will be able to enforce the proposed Model Ordinance update” because “they do not have enough qualified staff to review the paperwork and inspect projects.” Commenter continued “if property owners see the updated Model Ordinance as being too costly or overly complex, they may choose not to make landscape renovations that would save water or will seek to have work performed by unlicensed and unqualified persons, or simply circumvent the local permitting process. Commenter also stated that the “proposed Model Ordinance requires a great deal of paperwork and hoop jumping. These are often necessary, but CLCA urges [the Department] to ruthlessly remove any and all unnecessary obligations from this draft that may not result in a clear water conservation benefit.”

DWR Response: Reject and accept. Comments that local agencies cannot implement and enforce the Model Ordinance are general objections directed at the proposed regulation. The Model Water Efficient Landscape Ordinance is an existing regulation in effect since 1992 (California Code of Regulations, Title 23 Sections 490-495). The basic provisions written in the existing regulation are largely unchanged; however, provisions required by the statute have been added and many provisions have been simplified in response to comments. The applicability of the Ordinance is largely targeted at new landscape construction. Since most new landscape construction is tied to

new building construction, it will be difficult to circumvent the permit process. The assertion that the Ordinance will force property owners to use unlicensed or unqualified persons does not seem reasonable when one considers that planning, designing and construction will continue to be the primary costs associated with landscape construction and these costs will be incurred no matter who the property owner chooses to do the work nor will the existence of the Ordinance be a deciding factor. Working within the statute's limitations and mandated legal requirements DWR has attempted to modify the updated provisions to be the least burdensome to local agencies. DWR has avoided including unnecessary obligations in the updated Model Ordinance.

G14 Summary of Comment 88, 93:

Several commenters expressed concerns that local agencies cannot implement the Model Ordinance. A commenter stated “the level of detail included in the [Model] Ordinance cannot be efficiently implemented at the local level; that local agencies should be responsible for identifying the implementing mechanisms to meet the water efficiency standards set by the State;” that the proposed model ordinance requirements are overly specific and far reaching; that “local agency cost to implement the ordinance represents an unfunded mandate by the State” and that the “regulation is not conducive to cost effective implementation at the local level.” Another commenter stated the “staffing level required for the implementation of these revisions will be considerable and [we] do not believe that local agencies have available staff time or the expertise to perform the specified landscape plan reviews, landscape installation inspections and audits, and ongoing water budget analysis and required ongoing landscape audits, especially in service areas where the local agency is not the water provider;” that this increase in staff budget costs may be extreme and the staff intensive nature of the landscape plan review, inspection, and auditing;” that “to successfully implement and enforce this ordinance, local agencies will need to allocate program and staffing budgets and procure qualified staff and potential which will be a disincentive for adoption of the Draft Model Ordinance.”

DWR Response: Accept in part and reject in part. Comments that local agencies cannot implement and enforce the Model Ordinance are general objections not directed at the proposed regulation. The Model Water Efficient Landscape Ordinance is an existing regulation in effect since 1992 (California Code of Regulations, Title 23 Sections 490-495). DWR must adhere to the provisions of the statute. Working within the statute's limitations and mandated legal requirements, DWR has attempted to modify the updated provisions to be the least burdensome to local agencies and has avoided including unnecessary obligations in the updated Model Ordinance. Local agencies are free to develop a local ordinance that will fit their particular situations providing it is at least as effective as the Ordinance. The text of the proposed regulation was modified to reduce costs. DWR has also attempted to strike a balance among the oftentimes competing interests of statutory compliance, cost and practical application.

G15 Summary of Comment 152:

A commenter stated the [Model Ordinance] “requires extremely detailed planning, design and construction and maintenance guidelines [which] are unbelievably specific and onerous.” Commenters stated that the current version “does not meet the challenge in a cost effective manner” and recommend that [the Department] incorporate the comments from CLCA and ASIC. **DWR Response:** Accept in part and reject in part. Comments that the Model Ordinance cannot be implemented and enforced are general objections directed at the proposed regulation. The Model Water Efficient Landscape Ordinance is an existing regulation in effect since 1992 (California

Code of Regulations, Title 23 Section 490-495). DWR must adhere to the provisions of the statute; however, DWR has simplified and amended parts. All comments submitted were considered. The basic provisions written in the existing regulation are largely unchanged; however, many provisions have been simplified in response to comments. The Model Ordinance has specific provisions that are called for by the statute. Working within the statute's limitations and mandated legal requirements, DWR has attempted to modify the updated provisions to be the least burdensome to local agencies and has avoided including unnecessary obligations in the updated Model Ordinance. Local agencies are free to develop a local ordinance that will fit their particular situations and that is at least as effective as the Ordinance. The text of the proposed regulation was modified to reduce costs. DWR has also attempted to strike a balance among the oftentimes competing interests of statutory compliance, cost and practical application. To the extent possible, and where appropriate, comments from CLCA and ASIC were incorporated. The requirement for a pre-installation inspection has been removed, the audit and audit schedule have been modified to allow flexibility for local agencies to choose an appropriate audit method, and the 24 inch setback has been modified to allow for alternative methods if the objectives are met.

G16 This response was not revised.

G17 Summary of Comments 13, 20, 35, 55, 58, 62, 73, 74, 76, 77, 83, 84, 85, 88, 159, 161, 166: Regarding the Initial Statement of Reasons and the Notice of Proposed Rulemaking documents, numerous commenters disagreed with the Department's statement of no cost and no impact on local agencies, private persons and business. Many commenters stated that the rulemaking activity was an unfunded mandate; that local agencies do not have the resources to implement the proposed regulation; that the homeowner-installed or provided landscapes have cost implications to private persons and property owners; that cost of compliance is high for project applicants, property owners and local agencies. Other commenters asserted that the statement "local agencies will levy service charges, fees or other assessments to pay for the costs of adopting and implementing the model ordinance" contradicts the Department's statement that there will be no cost impact on private persons or directly affected businesses; that "in order to recover costs for increased staff time and miscellaneous costs, additional fees or in increase in existing fees would become necessary; however, increase in fees by the City or Water District may not be realistic at this time." Commenters stated that "the proposed model ordinance requires a number of unfunded mandates which the City of San Diego would be forced to appeal to the State Mandates Board. Local agencies under Prop 218 are required to have revenue neutral budgeting. Current budgets do not contemplate these new mandated programs which would force agencies to seek a Prop 218 fee increase. Such an increase could be rejected by ratepayers leaving local governments in the unfortunate position of being out of compliance with the ordinance with no means of getting back into compliance." Commenters disagreed with the Department statement that the initial cost to developers designing and installing water efficient landscapes would be the same; that "the Model Ordinance will in fact add considerable cost to new landscapes. There are many ways in which this will increase costs. One example is the requirement to use Weather Based Irrigation Controllers which are more expensive than standard controllers. Another example is in the makeup of the plant materials."

DWR Response: Reject. Costs were addressed in the Notice of Proposed Rulemaking and the Initial Statement of Reasons. The Final Statement of Reasons contains additional information on the fiscal impacts of the proposed regulation. Working within the statute's limitations and

mandated legal requirements, DWR has modified the text of the proposed regulation to reduce costs and allow a greater degree of flexibility to the local agencies. Local agencies are free to develop a local ordinance that will fit their particular situations, provided the local ordinance is at least as effective as the Model Ordinance.

Section 490 – Purpose

G18 This response was not revised.

G19 Summary of Comment 38:

Commenter stated that “the purpose describes the need to establish a structure for maintaining water efficient landscapes, managing water efficient landscapes and providing provisions for water waste prevention in landscapes. The scope of the purpose goes beyond the authority for the approval of a permit, plan check and plan review process. The scope creeps into the authority and jurisdiction of the local water retail purveyor. The role of the local retail water purveyor should be defined more clearly and the relationship between the local retail water purveyor and the local permitting authority should be defined in regards to maintenance of the approved landscapes and the water landscape audits.”

DWR Response: Reject. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (hh)) and a local water purveyor (Section 491 (ii)). Cooperative relationships between local agencies and water purveyors are a local issue and must be negotiated by said agencies. The statute is directed only to local agencies, but water purveyors are often well suited to perform some of the tasks such as monitoring, since many water purveyors already have landscape programs in place. DWR does not have authority to direct water purveyors.

G20 Summary of Comment 44:

Commenter requested that on page 2 Section 490 (e) after the words landscape design add [the words] and irrigation design.”

DWR Response: Reject. There were a few modifications made to this section, see Section 491 of the modified text of the proposed regulation. The wording is such because the regulation quotes the findings of the legislature.

G21 This response was not revised.

G22 Summary of Comment 59, 100:

Several commenters stated that “the current draft is overly prescriptive in its enforcement provisions.” DWR needs to provide a clear delineation of requirements on agencies that will develop a local ordinance. Procedures for compliance by applicants are best delegated to local agencies. Please look for a more performance-oriented approach, so that we may accomplish the goal of saving water. Given that new landscapes are likely to be a very small percentage in this region (estimates range around 5% +/- 2%) and therefore not have significant overall impact on water conservation, I support finding a way to include existing landscapes. Therefore the language

needs to clearly distinguish between several categories: a) new / rehab requiring a permit by current development rules; b) new / rehab not requiring a permit by current rules, but requiring a permit by new Model Ordinance rules; c) new / rehab, but not requiring a permit by either, d) existing landscapes; e) exempt landscapes. I also believe it is very important that ALL landscapes, even those not directly under the Ordinance, be explicitly and strongly encouraged to follow the Ordinance as a guideline for proper design, installation and maintenance.”

DWR Response: Reject. The Model Water Efficient Landscape Ordinance is an existing regulation in effect since 1992 (California Code of Regulations, Title 23 Section 490-495). The Model Ordinance is a model regulation that local agencies may pattern their local ordinances after and can include existing landscapes. Local agencies may also create a local ordinance that is very different in approach from the Model as long as the local ordinance is as least as effective in conserving water as the state Model Ordinance. The enforcement provisions are required so that the local agencies can use it as a model as they develop their own ordinance, if they so choose. The enforcement provisions have some degree of flexibility; see audit provisions of the Model Ordinance.

G23 Summary of Comment 150, 163:

A commenter stated that in “[Section] 490.1 (d) ‘replacing ecosystems lost to development’ is not the best word choice. I would think that ‘restoring would be a much better concept as it implies that the ‘replacement’ would be with the appropriate native plants and therefore more sustainable.” Another commenter stated that “in Section 490.1, you mention replacing -- or it is mentioned that replacing ecosystems lost to development. I believe that a better phrase instead of replacing would actually be restoring those landscapes. Replacement implies that you can put just about anything else in its place, whereas I think a better goal would actually be to restore those ecosystems to their -- as much as possible, to their previous state.”

DWR Response: Reject and Accept parts. There were a few modifications made to this section. See Section 490 Purpose of the modified text of the proposed regulation. “...[R]eplacing ecosystems lost to development” is a quote from Section 65593(d). The legislature found and declared this statement and the Department will not change the wording of a legislative finding.

Section 490.1 Scope and Section 490.2 Intent

Both of these Sections were DELETED in the Modified Text of Proposed Regulation

G24 This response was not revised.

G25 Summary of Comment 62:

Commenter stated “we have participated, over the last year, in the development of a county-wide ordinance that would create a uniform regional approach to landscape efficiency issues. It is anticipated that a version of this regional ordinance, with some modifications, would be considered for adoption by the City. Our concern is that the State Ordinance has become extremely specific and prescriptive, leaving little room for regions to adopt a plan that reflects the local climate, development patterns, and professional input. We would recommend a SMO that retains the specifics for agencies that choose to follow the SMO, but also sets performance levels as an alternative to the specific requirements outlined in the ordinance. Second, the process to determine if a local ordinance is ‘at least as effective’ should be delineated. The larger goals of the ordinance should be as outlined in Recommendation 29.1 of the AB 2717 Landscape Task force Findings,

Recommendations and Actions. Who will conduct this review process and will local agencies have the opportunity to discuss and explain the adequacy of their proposed ordinance?”

DWR Response: Reject. Government Code section 65597 requires the local agency and not the Department to determine the meaning of “at least as effective as” based on the agency’s own findings and evidence. The statute (Statutes of 2006, Chapter 559) states a local agency may adopt its own landscape ordinance that is “at least as effective as” the Model Water Efficient Landscape Ordinance and that local agencies may adopt an ordinance that reflects local water supply issues, development patterns and other local concerns. The author (Laird) of the legislation (AB 1881) provided the language “at least as effective as” but unfortunately, did not define its meaning. Local agencies may interpret “at least as effective as” to mean a local landscape ordinance that is, among other things, equivalent to the provisions of the Model Water Efficient Landscape Ordinance in 1) reducing water waste that occurs by irrigation runoff and overspray, and 2) increasing water use efficiency by establishing and monitoring water budgets, maintaining efficient irrigation systems, complying with MAWA, and applying appropriate plant selection. The scope section was deleted.

G26, G27, G28 These responses were not revised.

G29 Summary of Comment 113, 140:

Commenter stated that the [Model] Ordinance duplicates water efficiency programs that the District is obligated to develop” via best management practices of the Memorandum of Understanding Regarding Urban Water Conservation in California; that “these BMPs include requirements to offer and conduct customer surveys of indoor and outdoor residential water use, to create water use budgets for dedicated landscape meters, to offer and conduct water use surveys to large landscape customers with mixed-use meters, and to develop water use efficiency public information and education programs;” that “similar program requirements incorporated within the model ordinance, which does not apply to water agencies without land use authority, create an unnecessary duplication in service exactly the opposite of the ordinance's stated scope;” that model ordinance confuses the roles of water suppliers and local agencies in implementing this ordinance.”

DWR Response: Reject. The scope section was deleted. The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). Application of the Ordinance is directed largely at new construction, the goal being that landscapes will be designed and installed from the beginning to be water efficient and maintain a water budget. The CUWCC BMP’s are programs that largely include activities at existing landscapes, such as inspections, recommendations to the property owner, and leak detection. While these activities are very important, they occur on existing landscapes with the goal of improving efficiency. The goal of the Model Ordinance is to guide the installation of landscapes that will start out efficient. The Model Ordinance does not duplicate efforts of implementation of CUWCC BMP’s.

G30 Summary of Comment 114:

Commenter stated that “while the updated ordinance lists penalties that can be imposed to maintain implementation of ordinance locally, there are no penalties identified should a local agency choose not to implement the requirements of AB 1881. What are the penalties that could be imposed on a local agency for not implementing a local ordinance?”

DWR Response: Reject. The statute does not specify penalties that could be imposed and it is up to a local agency to include them, if any, in a local ordinance.

G31 Summary of Comment 68, 115:

Commenter stated that “the model ordinance would require the City to regulate landscaping in order to enforce the model ordinance. Does the ordinance require the City to report to an enforcement body? If so, who is the enforcement body?”

DWR Response: Reject. Section 65597 of the Statute states;

“Not later than January 31, 2010, each local agency shall notify the department as to whether the local agency is subject to the department’s updated model ordinance adopted pursuant to Section 65595, and if not, shall submit to the department a copy of the water efficient landscape ordinance adopted by the local agency, and a copy of the local agency’s findings and evidence in the record that its water efficient landscape ordinance is at least as effective in conserving water as the department’s updated model ordinance.” The State of California Department of Water Resources is not an enforcement body. The only obligation the Department has is to report the status of implementation by local agencies to the California legislature (see Statutes of 2006, Chapter 559 Section 65597). Local agencies, including cities and counties, are required to enforce and carry out the provisions of either the Ordinance or their own adopted local ordinance. Neither AB 1881 nor the Ordinance requires the local agency to report to an enforcement body. Local agencies may adopt and enforce penalty provisions as they deem appropriate.

G32 Summary of Comment 85, 154:

Commenter stated that “the Model Ordinance draft does not adequately address major weaknesses of the current ordinance that Western Policy Research pointed out in 2001- inadequate enforcement of the maximum water allowance after project completion and a lack of integrated enforcement efforts between land use agencies and water suppliers. The maintenance and auditing requirement in Section 492.13, 497.14 and 493.1 of the draft would accomplish very little to ensure that new or renovated landscapes will actually be irrigated under the Maximum Applied Water Allowance. The defects in the current Model Ordinance that were highlighted by the Western Policy Research can only be remedied by applying a water conservation rate structure that rewards customers for living within a water budget. Yet the proposed regulation misses what is arguably the single most important revision to the current model ordinance, one that would assure that the landscape installed actually achieves targeted water savings over the long term.”

DWR Response: Reject. The scope section was deleted. The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). Section 490.2 (Intent) was also deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). Water conservation rates were encouraged but DWR must comply with provisions of the statute and DWR does not have authority to set or require a water conservation rate structure. The proposed regulation attempts to achieve the statute’s primary goal of conserving water through efficient and effective landscaping and irrigation practices and technologies.

G33 Summary of Comment 5:

A commenter stated “Section 490.2 refers to activities not covered by the [Model] Ordinance. Please add agricultural activities”

DWR Response: Reject. Section 490.2 (Intent) was deleted in its entirety because the statute was directed at efficiency in urban landscaping (including landscaping with edible plants) and not to commercial agricultural activities. But some of these provisions were retained and relocated to Section 490 (b). Gardens comprised of edible plants are allowed a higher water budget than landscaping used for aesthetic or environmental purposes.

G34 This response was not revised.

G35 Summary of Comment 20:

Regarding Section 490.2 (7), commenter stated “landscape architects and landscape contractors are already licensed by the State of California to prepare a landscape and irrigation documentation packages. Most local agencies already require licensed landscape architects or landscape contractors to prepare and sign landscape and irrigation construction packages. Irrigation consultants can provide consulting services under the Landscape Architects Practice Act Rules and Regulations Business and Professions Code Section 5641.6 without being certified. Individuals are not required to be licensed to practice irrigation design within the State of California.”

DWR Response: Accept in part. Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). Revisions have been made to the allowable signatures on the landscape and irrigation design plans. The Ordinance does not require that an individual be licensed to design the irrigation system. The Ordinance requires that the designer be authorized, by California law, to perform design services. The Ordinance now states that these design plans shall, “*bear the signature of a licensed landscape architect, licensed landscape contractor or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)*”

G36 This response was not revised.

G37 Summary of Comment 38:

Commenter stated that “the intent [section] describes the use of the MAWA, water use education, and rates all of which are usually implemented primarily by the local water retailer or wholesaler. The roles of the local water retail purveyor and the local (permitting) agency should be better defined.”

DWR Response: Accept in part. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). Beyond the definitions, the roles of water purveyors are local issues and must be negotiated locally between agencies. Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). The Department can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). Section 490.2 (6) was modified and renumbered accordingly: *encourage local agencies and water purveyors to use economic incentives that promote the efficient use of*

water, such as implementing a tiered rate structure, Section 490 (b) (6). In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7).*

G38 Summary of Comment 45:

Commenter stated that “the Model Ordinance requirement is placed on local agencies but the City of Ontario is the primary water purveyor for the city; there are pockets of land that fall under the jurisdiction of a local water purveyor. As we understand it, the local water purveyor would not be subject to the Model Ordinance nor can they share information with the City. This leaves the City in the position of requiring compliance without the benefit of water usage information. Local water purveyors should be subject to the model ordinance or be required to share information with local jurisdiction responsible for implementing the Model Ordinance.”

DWR Response: Accept in part. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). Beyond the definitions, the roles of water purveyors are local issues and must be negotiated locally between agencies. Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). The Department can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). Section 490.2 (6) was modified and renumbered accordingly: *encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered rate structure, Section 490 (b) (6).* In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7).*

G39 This response was not revised.

G40 Summary of Comments 63, 72, 76, 91, 109, 110, 114, 133, 158:

Several commenters asked that the roles and requirements of water purveyors and local agencies be clearly defined because the Model Ordinance places requirements on cities and counties that only water purveyors can perform; that cities and counties that are not the local water purveyor are generally not equipped to provide water conservation education programs and water audit programs. Commenters asked why comply with this Model Ordinance when water purveyors already have programs. Commenter stated that “while it is reasonable that cities with their land use permitting powers should be the lead agency for new and substantially-rehabilitated landscape projects requiring permits, it is not reasonable to assume that cities have the capacity to oversee water consumption over time; most city governments do not operate and have no direct control over water supply infrastructure and do not have any right to water consumption data for individual sites. Water purveyors (unlike cities which are very constrained in their revenue-generating options) have this control and data access as well as the ability to raise or tier water rates to meet their expenses or to encourage conservation. A mechanism is necessary to require that the retail water purveyors should be the responsible lead agency for tracking and enforcing water consumption against the water budgets for existing developments. Cities and water

purveyors should be required to coordinate to determine the most effective ways to achieve water conservation goals for both new and existing developments.” Other commenters similarly stated that “some water purveyors treat water use information for their customers as confidential information and do not this information without approval of the customer. For new or rehabilitated sites, the [landscape] documentation package should include a Release of Information, signed by the property owner, of water use data from the water purveyor to the city [or local agency] to facilitate compliance. Cities should be obligated to provide the water purveyors with area measurement information to coordinate this aspect of the [Model] Ordinance.”

DWR Response: Accept in part. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). The statute applies directly to local agencies. Beyond the definitions, the roles of water purveyors are local issues and must be negotiated locally between agencies. Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The proposed regulation was modified to include separate definitions for a local agency ((Section 491 (ii)) and a local water purveyor (Section 491 (jj)). The Department can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). Section 490.2 (6) was modified and renumbered accordingly: *encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered rate structure, Section 490 (b) (6)*. In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7)*.

G41 Summary of Comment 65:

Commenter stated that “if the [the Department] did nothing more than require tiered structured water rates, they will see tremendous reductions in water without the need for all of this rule book writing. Efficiency means low water rates and waste means you pay triple. That simplicity will entice cities, schools, HOA's, cemeteries, etc. to spend money on consultants and other landscape professionals to fix the problem quickly and efficiently the way private enterprise works best. Water is business and rate structuring will force business to react in a manner that will get results. When I began managing water in the 80's, I never imagined that it would be 2010 before I would realize that water management would be a real business. Until water becomes gas-like expensive will consumers realize that they need to improve their efficiency and actually manage their water. Unlike gas, tiered structure water rates give the consumer the opportunity to be rewarded for efficiency...and efficiency pays.”

DWR Response: Reject. The Department can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). Section 490.2 (6) was modified and renumbered accordingly: *encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered rate structure, Section 490 (b) (6)*. In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7)*. It is not cost effective to continue the installation of inefficient landscapes and then “fix” them later. The overall purpose of the Model Ordinance is to guide the installation of efficient landscapes from the start. Private industry

enterprise should lead to water conservation efficiencies in that all landscape professionals will have the opportunity to design, install, and maintain efficient landscapes.

G42 This response was not revised.

G43 Summary of Comment 78:

Commenter stated that “The City of Dana Point and many other local agencies (cities or counties) as defined on page 6 are not water purveyors or water providers as discussed in the Act itself. For example, water is provided to most cities by various water districts in our county. Cities here neither provide water, no meters, not water rates, nor do we know water customers or water usage, nor can we shut water off or penalize our customers. Water purveyors/supplies, i.e., water districts, have jurisdiction over these actions, not cities.” Commenter recommended requiring “AB 1881 compliance from water purveyors, require this at least for applicable sections of the Ordinance, such as the operations/maintenance (post construction) related requirements of section 492.12, 492.13, 49.14, 492.15, 492.16, 492.18 and all of 493 for existing landscapes. Local agencies and water purveyors need to work together to meet the goal. Also, coordination with our Regional Water Quality Control Board is highly recommended.”

DWR Response: Accept in part. Beyond the definitions, the roles of water purveyors are local issues and must be negotiated locally between agencies. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7)*. Because the statute (Statutes of 2006 Chapter 559) governs only local agencies and it does not define local agencies as including water purveyors, DWR does not have the authority from AB 1881 to require action on the part of water purveyors in the Model Ordinance.

G44 Summary of Comment 81:

Regarding Section 490.2 (1), (4) and (6), commenter stated “help (or even mandate that) water purveyors establish rebate programs to encourage conversion of existing controllers to high tech controllers. Then expect purveyors to monitor actual usage versus MAWA, apply very substantial price increase for usage that substantially exceeds MAWA (our District didn’t get much result from economic based signals until the upper rates blocks reached about 10X the base rate – about \$20+ per unit). The goal should be one of establishing a MAWA based water usage monitoring structure that can be created and monitored largely through computer tools using existing data bases.”

DWR Response: Accept in part. Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The Department can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). Section 490.2 (6) was modified and renumbered accordingly: *encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered rate structure, Section 490 (b)*

(7). The Department can not require that water purveyors offer rebate programs, however through grant funding, the Department has offered financial assistance to numerous water agencies by funding rebate programs. Because the statute (Statutes of 2006 Chapter 559) governs only local agencies and it does not define local agencies as including water purveyors, DWR does not have the authority from AB 1881 to require action on the part of water purveyors in the Model Ordinance.

G45 Summary of Comment 83:

Regarding Section 490.2 (6), Commenter stated that “the creation of design standards to implement water conservation is appropriate and is clearly within the statutory authority of the municipalities to which this document applies. However, in our opinion, standards that impose requirements on water purveyors are beyond the statutory authority of the legislation and simply impractical. Enforcement, beyond what is allowed through code compliance, should be a separate regulatory action targeting the water purveyance entities.”

DWR Response: Accept in part. The Model Ordinance does not govern or otherwise impose any direct requirements on water purveyors. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7)*. Because the statute (Statutes of 2006 Chapter 559) governs only local agencies and it does not define local agencies as including water purveyors, DWR does not have the authority from AB 1881 to require action on the part of water purveyors in the Model Ordinance.

G46 This response was not revised.

G47 Summary of Comment 93, 105:

Commenter expressed concerns “about the ability and willingness on non-water supplying local agencies to adopt and enforce this Draft Model Ordinance given the long and technical nature of the revised specifications and the associated budget and staffing burdens on local agencies, which may not have staffing levels to accommodate the additional workload or expertise to review landscapes to the Draft Model Ordinance specifications.” Another commenter stated that “the process is overly complicated, and would be burdensome to administer. The guidelines diminish the role of water purveyors that are separate from municipalities in the protection of their water resources. They also create an extra burden for these districts, some of which would have to deal with multiple city and county governments.”

DWR Response: Accept in part. The Model Water Efficient Landscape Ordinance is an existing regulation in effect since 1992 (California Code of Regulations, Title 23 Section 490-495). The statute (Statutes of 2006 Chapter 559) applies to local agency and it defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). Section 490.2 (Intent) was deleted in its entirety but some of these provisions were retained and relocated to Section 490 (b). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491

(jj)). In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7)*. The statute was directed at local land use agencies because they have the authority to implement the permit/review process. The review process is currently a function of local agencies and is not a new responsibility. The Model Ordinance does not seek to diminish the role of water purveyors, because any current cooperation between water purveyors and local agencies may and should continue, and is encouraged by DWR.

G48 Summary of Comment 160:

Commenter stated that “the San Diego County Water Authority has something like 27 different water agencies. Those water purveyors, many times, are separate from the municipalities and the cities. Those cities don't talk to them; sometimes they don't even get along with them. So asking -- and they have no jurisdictional authority over them, so the document reaches between those two entities in a way that's very difficult. We think that you should address the compliance with code compliance and -- enforcement with code compliance, and then work on separate legislation that deals with the water purveyors.”

DWR Response: Accept in part. The statute (Statutes of 2006 Chapter 559) defines a local agency accordingly: “*any city, county, or city and county, including a charter city or charter county*” (Section 65591 (b)). The proposed regulation was modified to include separate definitions for a local agency (Section 491 (ii)) and a local water purveyor (Section 491 (jj)). The Department can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). Section 490.2 (6) was modified and renumbered accordingly: *encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered rate structure, Section 490 (b) (6)*. In addition, Section 490.2 (2) was modified and renumbered accordingly: *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (7)*. The Department must update the Model Ordinance according to the statute. The statute does not permit the Department to enforce code compliance or impose penalties. The Model Ordinance does not seek to diminish the role of water purveyors, because any current cooperation between water purveyors and local agencies may and should continue, and is encouraged by DWR.

Section 490.1 Applicability

G49, G50 These responses were not revised.

G51 Summary of Comment 5, 10, 14, 16:

Commenters requested clarification of the applicability section. Does new construction refer to any permitted construction on the property or is it referring to landscape construction? And, if so, how much new landscaping would trigger applicability for an existing home with over 2,500 sq ft of landscaping?

DWR Response: Accept in part. Section 490.1 Applicability has been modified to improve clarity. The term “new construction” has been added to the Definitions section and the definition of “rehabilitated landscapes” has been modified to clarify the extent of landscape that must be modified in order for the ordinance to apply.

(ccc) “rehabilitated landscapes” means any re-landscaping project that requires a permit, plan check, or design review, and meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are completed within one year.

(qq) “new construction” means, for the purposes of this ordinance, a new building with a landscape or other new landscape.

G52 Summary of Comment 14:

Commenter states that the Model Ordinance does not address all outdoor water uses, such as filling pools, spas and fountains, vehicle washing and others.

DWR Response: Accept in part. The Ordinance has been modified to more clearly identify the water features addressed. Section 491 Definitions *(qqq) “water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.*

Other types of water waste, not related to landscape water use, are beyond the scope of this Ordinance and are addressed in a local agency’s municipal codes or drought contingency plans.

G53 This response was not revised.

G54 Summary of Comment 20, 25, 59, 98, 112:

Commenters state that if this Model Ordinance is enacted as currently proposed, there will be an increase in the amount of fees paid to landscape architects and irrigation consultants, new fees to be paid to water auditors that will now be needed in order to certify each and every landscape project across the state that exceeds 2,500 square foot in size. And there will be an increase in the amount of personnel that each local agency will need in order to review all of these new documents that are now being required to be submitted.

DWR Response: Accept in part and reject in part. The Ordinance has been modified so that local agencies are no longer required to conduct mandatory audits except for newly installed irrigation systems, thereby, greatly reducing any expenses that might be incurred by the local agencies. It is customary for applicants to pay fees for permit approval.

G55 This response was not revised.

G56 Summary of Comment 34:

Regarding Section 490.3, a commenter stated that “the statute should apply to all landscapes, eliminate the 2,500 foot exemption. All new homes should have sub-metered outdoor

consumption and existing systems should have to add one or have a control system with a flow sensor included so monthly outdoor consumption can be monitored.”

DWR Response: Accept in part and reject in part. The 2,500 square foot threshold is part of the existing regulation (California Code of Regulations, Title 23 Sections 490-495) and the threshold remains in place in the modified text of the Ordinance in order not to place an undue burden upon local agencies or water use customers that a smaller threshold would entail. The applicability to homeowner provided landscapes remains mostly the same in the modified text of the proposed regulation but renumbered as Section 490.1 (a) (3). However, the threshold was increased from 2,500 square feet to 5,000 square feet for homeowner provided landscape projects only. Urban landscapes account for significant amounts (30-50 percent) of outdoor water use in California and the Department supports provisions targeting this sector. Provisions for new construction landscape projects and rehabilitated landscape projects by public agencies and private developers etc. remain the same but were slightly modified and renumbered as Section 490.1. The modified Model Ordinance includes provisions for tracking and monitoring water use by local agencies and water purveyors. By statute, dedicated landscape meters are required as a condition of new water service on properties greater than 5000 sq. ft. of irrigated landscape, not including single family residences. Requiring dedicated landscape meters at all locations, retrofitting existing landscapes with dedicated meters and control sensors is beyond the scope of this Ordinance. All new homes are installed with meters per existing state law.

G57 Summary of Comment 33, 42, 48, 56, 81, 108:

Several commenters recommended deleting the provision for homeowner provided landscapes for single family homes of all sizes. This provision is unrealistic and not enforceable. Both politically and administratively it would be hard to enforce homeowner-provided or homeowner-hired landscaping for single family and multi-family residential projects equal to and greater than 2,500 feet.

DWR Response: Accept in part and reject in part. The Ordinance has been modified to increase the threshold for homeowner provided landscape projects from 2,500 square feet to 5,000 square feet. An additional modification has been to remove rehabilitated landscapes that are homeowner provided from the requirements of Section 492 through 492.17. Large landscape projects will be of such a scale that the requirements of the Ordinance not be unduly burdensome and the water savings may be significant.

G58 Summary of Comment 44:

Regarding Section 490.3, commenter stated that “there is a responsibility with owners and occupants of ALL properties regardless of property size, to conserve water and use it wisely. What will be allowed by an ordinance not applicable to projects with a landscape area of 2,500 square feet or less, is an open environment to potential misuse or waste of water, the very thing this ordinance seeks to curtail. Granted, not all property occupants may be property owners, and not all properties have significant landscape areas. However, this should not cause one water customer over another to not follow water conservation practices and methods while the other is subject to this ordinance.” Commenter recommended that “the applicability section be revised with applicability to all water use customers.”

DWR Response: Accept in part and reject in part. The 2,500 square foot threshold is part of the existing regulation (California Code of Regulations, Title 23 Section 490-495) and this threshold remains in place in the modified text of the Ordinance in order not to place an undue burden upon

local agencies or water use customers that a smaller threshold would entail. The threshold for homeowner provided projects was increased from 2,500 square feet to 5,000 square feet. Urban landscapes account for significant amounts (30-50 percent) of outdoor water use in California and the Department supports provisions targeting this sector. Provisions for new construction landscape projects and rehabilitated landscape projects by public agencies and private developers etc. remain mostly the same but were slightly modified and renumbered as Section 490.1.

G59 Summary of Comment 45:

Commenter stated that the rehabilitation of sites [greater than] 2,500 square foot of landscape area is subject to the requirements of the [Model Ordinance] but the enforcement of this type of regulation is problematic at best. Commenter also stated that “there is currently no permit required to re-landscape a yard nor is there a certificate of occupancy issued by the City for existing development. Establishing a permit process will not insure compliance and in fact result in individuals bypassing the process to avoid the additional requirements imposed by the [Model Ordinance].”

DWR Response: Accept in Part.. Urban landscapes account for significant amounts (30-50 percent) of outdoor water use in California and the Department supports provisions targeting this sector. The Certificate of Occupancy requirement has been deleted. The 2,500 square foot threshold is part of the existing regulation (California Code of Regulations, Title 23 Sections 490-495) and the threshold of 2,500 square feet for developer-installed landscapes remains in the Ordinance in order not to diminish the potential for water conservation. However, DWR recognizes that difficulty in enforcing this provision for rehabilitated landscapes in single-family homes. The Applicability section (490.1) has been modified removing rehabilitated landscapes that are “homeowner provided from the requirements of Section 493. This was primarily in response to the majority of public comments that this threshold was too low to be practical.

The following provisions of Section 491 Definitions have been modified:

(eee) “rehabilitated landscape” means any re-landscaping project that requires a permit , plan check, or design review, meets the requirements of Section 490., and the modified landscape area is equal to or greater than 2,500 square feet, and is 50% of the total landscape area, and the modifications completed within one year.

If the rehabilitated landscape does not meet the criteria in this definition, the provisions in section 492 do not apply. The Ordinance does not have any provision specifically requiring local agencies to develop a permit program in order to more closely regulate rehabilitated landscapes. The permitting process is a local issue.

G60 Summary of Comment 50:

Commenter stated that “the City staff is unaware how the 2,500 square feet threshold was established. In addition, City Staff believes it is unreasonable for the ordinance to apply to individual homeowners with minor re-landscaping projects greater than 2,500 square feet.”

DWR Response: Reject. The 2,500 square foot threshold is part of the existing regulation (California Code of Regulations, Title 23 Sections 490-495) and was established at that time by an advisory task force. The threshold of 2,500 square feet for developer-installed landscapes remains in the Ordinance in order to increase the potential for water conservation. DWR recognizes that homeowner provided landscapes are difficult to regulate and can cause an undue burden on individual homeowners. Therefore, the threshold for new construction landscapes that are homeowner provided was increased from 2,500 square feet to 5,000 square feet. This was

primarily in response to the majority of public comments that this threshold was too low to be practical. Rehabilitated landscapes that are homeowner provided are now subject to the Ordinance requirements of Section 493.

Rehabilitated landscapes have been defined in the Ordinance (*eee*) “*rehabilitated landscape*” means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications completed within one year. This definition excludes minor re-landscaping projects.

G61 Summary of Comment 54:

Commenter stated that “I am a resident of Los Alto Hills (LAH), an affluent residential community of about 3,000 properties (most \geq one acre) in Santa Clara County. I strongly support applying the ordinance to both new and existing landscapes \geq 2,500 square feet (including homeowner provided ones) at single-family residences in residential communities with large parcels. LAH staff at request of City Council has written the DWR asking that homeowner provided landscaping in single-family residential projects in LAH remain exempt from the Model Ordinance. I strongly and respectfully disagree. The Town’s long history of failing to review landscape projects or to impose restrictions on excessive landscape water use (despite excessive and escalating water consumption) indicate that LAH is exactly the type of jurisdiction for which this [Model] Ordinance is intended. Further, because virtually all landscape projects in LAH are “homeowner provided”, exempting this class of landscaping will in effect make all landscapes in the Town exempt. It may be appropriate for LAH to develop its own water-efficient landscape ordinance as an alternative to the Model Ordinance. Under no circumstances, however, should the Town be exempted from any type of landscape water use ordinance. An ordinance will provide incentive for LAH to finally begin imposing limits on the large, water-intensive landscapes that it has for decades freely allowed in the Town.”

DWR Response: Accept in part. The 2,500 square foot threshold is part of the existing regulation (California Code of Regulations, Title 23 Section 490-495). This threshold remains in place in the modified text of the Ordinance in order not to place an undue burden upon local agencies or water use customers that a smaller threshold would entail and to retain the water conservation goals of the Ordinance. However, the threshold was increased from 2,500 square foot to 5,000 square foot for homeowner provided landscape projects only. This was primarily in response to the majority of public comments that this threshold was too low to be practical. Exempting all single family residential projects from the Ordinance as the Los Altos Hills City Council suggests would thwart the statute’s underlying purpose of statewide water conservation.

Urban landscapes account for significant amounts (30-50 percent) of outdoor water use in California and the Department supports provisions targeting this sector. Local agencies are required to adopt a water efficient landscape ordinance, either the Model or a local ordinance. Section 65597 of the Statute states;

“Not later than January 31, 2010, each local agency shall notify the department as to whether the local agency is subject to the department’s updated model ordinance adopted pursuant to Section 65595, and if not, shall submit to the department a copy of the water efficient landscape ordinance adopted by the local agency, and a copy of the local agency’s findings and evidence in the record that its water efficient landscape ordinance is at least as effective in conserving water as the department’s updated model ordinance.”

G62 Summary of Comment 55, 58, 59, 62, 66, 74, 83, 100, 113, 114, 140, 153, 154, 157, 158, 160, 171:

Multiple commenters stated that “the range of sites [landscape projects] subject to the design criteria in the ordinance is too broad to be effective” and requested that “[the Department] raise the coverage area threshold from 2,500 to 5,000 square foot because the [proposed] draft of the [Model Ordinance] would require local agencies to exercise the same level of control over individual homeowner projects that it does over master planned communities, which is unreasonable for local agencies and overly burdensome to the typical homeowner.”

Commenter stated that “the applicability and enforcement provisions proposed in the Model Ordinance are burdensome...the proposed [regulation] exceeds the scope of [the legislation] AB 1881 and recommendations of the AB 2717 [Landscape] Task Force because [it] significantly expands the types of projects this Model Ordinance would apply to. The proposed model ordinance would apply to all new, rehabilitated and existing landscapes with a minimum of 2,500 square feet of landscaped area. Therefore, a significant portion of existing single-family residences...would be subject to these provisions. At a minimum, the threshold should be no less than 5,000 square feet of landscaped area, and all single-family properties should be exempt. Including homeowner self-installed projects is unrealistic.” Another commenter stated that “requiring a single family homeowner with 2,500 square feet of landscape to produce the complicated plans, soil analysis, and water use calculations required to comply with this document is simply not realistic...so...small lot single family homeowners should not have to comply. Only single family projects with a landscape area of over 5,000 square feet should have to comply. This will include the most wasteful large single family homeowner landscapes that typically are installed and designed by professionals.” Another commenter recommended “that any site with less than 5,000 square feet of landscape area be excluded from the design review process, unless required by other jurisdictional permit requirements, as long as evidence of an educational and/or incentive program is in place at either the local agency or water purveyor level.” Some commenters stated they wanted the threshold raised to 10,000 square foot.

DWR Response: Accept in part and reject in part. The 2,500 square foot threshold is part of the existing regulation that was established by an advisory task force (California Code of Regulations, Title 23 Section 490-495). The threshold of 2,500 square feet for developer-installed landscapes remains in the Ordinance in order to increase the potential for water conservation. However, the threshold for new homeowner provided landscape projects has been increased from 2,500 square feet to 5,000 square feet and homeowner provided rehabilitated landscapes have been exempted from the requirements of Section 492 through 492.17 based in large part on public comments because this threshold was, on balance, deemed to be impractical.

G63 This response was not revised.

G64 Summary of Comment 59:

The language needs to clearly distinguish between several categories: a) new / rehab requiring a permit by current development rules; b) new / rehab not requiring a permit by current rules, but requiring a permit by new Model Ordinance rules; c) new / rehab, but not requiring a permit by either, d) existing landscapes; e) exempt landscapes. I also believe it is very important that ALL landscapes, even those not directly under the Ordinance, be explicitly and strongly encouraged to follow the Ordinance as a guideline for proper design, installation and maintenance.

DWR Response: Reject. Categories of landscapes have been distinguished in the Applicability section of the Ordinance. Existing landscapes are included in the Ordinance and are subject to Sections 493 through 493.2. Local agencies may impose additional categories that are more specific and provide further landscape distinctions.

G65 Summary of Comment 59:

The Model Ordinance is unclear in how it relates to the design review procedures for landscapes that are subject to review by the Design Review Board (DRB) or a homeowner association.

DWR Response: Reject. The local agency is responsible for determining its procedures for interfacing with the Design Review Board or homeowner associations.

G66, G67 These responses were not revised.

G68 Summary of Comment 5, 16, 59, 74, 84, 85, 90, 133:

The Model Ordinance applies to landscape projects “requiring a permit, plan check or design review”. Some local agencies do not have a process in place for permitting landscapes. It is not clear whether or not these currently un-permitted landscapes are exempt from the ordinance, or not. It should be clarified that this provision will not trigger a new permit requirement where one does not already exist.

DWR Response: Reject. Local agencies oversee development within their jurisdictions by various means. Some of these methods include permitting, plan check or design review. Even in locations where landscape permits are not required, proposed projects must be reviewed and approved by the local agency in order to meet general plan requirements, and prevent haphazard development. A local agency is not required to establish a new landscape permitting process where one does not exist, but may use the plan check or design review process to evaluate compliance with the ordinance by proposed landscape projects. For example, a local agency may not require a landscape permit, but may evaluate a tentative residential subdivision map to ensure that the model ordinance or the local ordinance requirements are met.

G69 This response was not revised.

G70 Summary of Comment 84:

It is unclear whether the MWELO applies to (1) Landscaping of 2,500 square feet or more (associated with a development project) that requires a permit, plan check or design review; or (2) A development project that requires a permit, plan check or design review, which includes more than 2,500 square feet of landscaping.

DWR Response: Accept in part. The 2,500 square foot threshold refers to the total landscape area of a project, whether the project is the building, or the landscape, or both, that require the permit, plan check or design review. Also, the threshold for homeowner provided landscapes was increased from 2,500 square feet to 5,000 square feet.

G71, G 72 These responses were not revised.

G73 Summary of Comment 53, 56, 87, 90, 98:

Several commenters stated that public parks should be given a higher water allowance to provide for active recreational needs of the community.

DWR Response: Accept. The Ordinance has been modified so that recreational areas are given an additional water allowance not to exceed an ETAF of 1.0.

G74 This response was not revised.

G75 Summary of Comment 98: We cannot rely on native plant materials to provide the intent of the aesthetic requirements of the Zoning Ordinance. First there is an issue with native plant availability in the container sizes that meet the requirements of the Zoning Ordinance and second, there is a concern with the kind of maintenance that these new materials will require and what the industry can provide. There needs to be consideration for a time factor to allow the industry to be able to provide plant materials suitable in acceptable container sizes and that are appropriate for ornamental use and maintenance therein. If the plant material is not available to meet the Water Ordinance and the Zoning Ordinance there is no way that the intent of this Ordinance can be met.”

DWR Response: Reject. The existing Ordinance requires that local agencies permit new and rehabilitated landscapes that are designed to meet the Maximum Applied Water Allowance (MAWA). Native plants are not a requirement in either the existing or the updated Model Ordinance. The requirement is to meet the MAWA. The use of low water using plants in the landscape will assist in meeting the MAWA, but is not a requirement.

G76, G77, G78 These responses were not revised.

G79 Summary of Comment 111:

Commenter stated that often, local agencies will review and approve developer-installed front-yard landscaping for multiple single-family tract homes under one permit. While individual landscaped front-yard lots would not meet the 2,500 square foot standard mentioned in Section 430.1, in the aggregate, the project may. It is unclear as to how the State's standard would apply in such circumstances. The County recommends that the standard apply to individual lots rather than the aggregate landscaped area under the permit in question.

DWR Response: Reject. Section 490.1 (a) (2) pertains to tract development projects or master planned community projects for single family and multi-family residential units. The 2,500 square foot threshold refers to the total landscape area of a project. In order to conserve water, DWR determines that if a project (i.e., tract development) has a total landscape area, in aggregate, equal to or greater than 2,500 square foot, it is subject to the proposed regulation.

G80 This response was not revised.

G81 Summary of Comment 115:

Commenter stated that the Applicability section requires existing landscapes with a landscaped area equal to or greater than 2,500 square feet be limited to 493.1. This section applies to existing landscapes installed before January 1, 2010 and appears to go beyond what is specified in AB 1881. In order for local agencies to fulfill this requirement they would need to know the irrigated area by water meter for existing landscapes. This is a tall order even for water purveyors working in good faith to implement BMP No. 5 - Large Landscape Conservation Programs.

DWR Response: Accept in part. Regulation of existing landscapes does not exceed the authority of AB 1881. The provision for water management of existing landscapes is part of the existing regulation (California Code of Regulation, Title 23 Section 493 (a)) and AB 1881 does not alter

that requirement. Landscapes installed prior to January 1, 1993 are also addressed in the existing ordinance (AB 325 Statutes of 1990) in Section 493. The proposed modified text reflects the existing regulation.

However, the requirements for existing landscapes (Sections 493 to 493.2) have been modified. Ongoing, mandatory irrigation audits for existing landscapes are no longer required, the landscape area threshold for existing landscapes has been raised to one acre, and only existing landscapes with water meters shall be required to meet MAWA. With the use of GIS and other technologies, this requirement is able to be met and, in fact, is being met by several water purveyors in the state. For existing landscapes without water meters, the local agency is required to administer programs that verify proper operation of the irrigation system and prevent water waste.

G82, G83, G84, G85, G86, G87, G88 These responses were not revised.

Section 491 Definitions

G89 Summary of Comment 44:

Applied Water. Commenter stated that “after [the words] irrigation system add method.”

DWR Response: Reject. There is no change to the definition which is renumbered as Section 490 (a). The word “method” is not appropriate and does not make sense in the context of this definition. The subject is the water applied by the irrigation system, the method of application does not matter.

G90 This response was not revised.

G91 Summary of Comment 67:

Certified Irrigation Auditor. Commenter requested to “reference certification programs without offering specific criteria for such programs.” Commenter suggested the following revision:

“Consider the adoption of criteria similar or identical to that of the U.S. EPA WaterSense certification program for irrigation professionals. Specification can be found at <http://www.epa.gov/watersense/specs/cert/htm>”

DWR Response: Reject. However, a minor change was made to the definition which is renumbered as Section 491 (f). The definition does not offer specific criteria, it explains what a certified auditor is and what types of organizations may certify auditors because the definition section does not allow for detailed listings of required certification criteria. Still, the public is advised to review the US EPA WaterSense certification program for more details.

G92 Summary of Comment 50, 67:

Certified Irrigation Designer. Commenter asked “What does certified mean? And, what amount of time and expense could this represent to the property owner?” Another commenter stated that the [definition] “needs additional clarification as to certification requirements.”

DWR Response: Reject. However, a minor change was made to the definition which is renumbered as Section 491 (g). “Certified” means meeting the certifying organization’s criteria. The property owner with no irrigation design experience should not have to be expected to expend additional time determining whether certification criteria have been met, but may expend additional expense for the audit. The auditor may find problems with a new irrigation system that

can be rectified immediately. If the system is not audited when installation is complete, problems with the system's operation may go unnoticed for some time.

G93 Summary of Comment 57:

Controller. Commenter stated that “we propose controller means an automatic timing device or assemblage of components used to remotely control valves or sprinklers to set an irrigation schedule. Such a controller or assemblage of components could use evapotranspiration, weather or soil moisture sensor data to automatically adjust the irrigation schedule (490 #10 proposed). The proposed definition eliminates confusion that is created by using only the word controller, which infers a single device.”

DWR Response: Accept in part. A controller is a single device that operates the irrigation system. For example, auxiliary sensors may interrupt the signal to the valves, but they are not the controllers. The proposed name of the term has been modified from “controller” to “automatic irrigation controller” to reflect the language in the statute.

The definition has been revised to better describe the function of the automatic controller.

However, for improved clarity, the revision is different than the commenter's suggestion.

Section 491. (b) *“automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.*

G94 Summary of Comment 44:

Controller. Commenter stated that “after [the word] heads add irrigation method. There are more methods today for applying irrigation water than only heads. Therefore, the terminology used throughout this ordinance should reflect it based on this. Also after [the words] weather data add to effect watering and after [the words] i.e., soil moisture sensor add wind sensor, weather sensor, etc.”

DWR Response: Accept in part. This definition has been modified. The word “heads” has been replaced with “valves” to more accurately describe the devices that apply irrigation water. Also, the types of acceptable data used by an automatic irrigation controller are only evapotranspiration data or soil moisture data. Other sensors do not provide enough information to the controller to properly schedule irrigation. These sensors are required in the Irrigation Design Plan 492.7

(a)(1)(D) *Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions.*

This definition has been clarified. Section 491. (b) *“automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.*

G95 Summary of Comments 74, 114:

Controller. Commenter stated that “the Irrigation Association definition of a SmarTimer [should] be incorporated into the model ordinance language. The IA, through a stakeholder-based process including water purveyors, has developed and adopted Smart Water Application Technology (SWAT) testing protocols to verify that SmarTimers operate as claimed by the manufacturer.

Many controllers have already completed this testing. This testing is conducted at the Center for Irrigation Technology at Fresno State University. The SWAT testing protocol for soil moisture based technologies is near completion. Water purveyors throughout the state, including MWDOC, currently rely on SWAT testing as the basis of our approved list of products eligible for rebates. In addition, EPA also intends to rely on existing testing protocols to develop their WaterSense list of SmarTimers. The model ordinance should reference the WaterSense list of SmarTimers so that as the SWAT testing protocols advance, the language in the Model Ordinance will not need to change over time.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (d)). There is no change to the definition which is renumbered as Section 491 (b). The statute (Statutes of 2006 Chapter 559) directs DWR to include provisions for the use of automatic irrigation systems and irrigation schedules based on climatic conditions, specific terrains and soil types, and other environmental conditions. The SmartTimer would meet the automatic irrigation controller definition in Section 491 (b) because it complies with these statutory criteria, among others. It is an example of the kind of controller the statute was meant to include. So there is no need to specifically identify it in the regulation. The statute (Statutes of 2006 Chapter 559) directs DWR to include provisions for the use of automatic irrigation systems and irrigation schedules based on climatic conditions, specific terrains and soil types, and other environmental conditions. By definition, SmartTimer falls within the automatic controllers as defined in Section 491 (b).

G96 Summary of Comment 20:

Controller. Commenter stated that “AB-2717 recommended the use of Smart Controllers as a way of reducing water in the landscape. AB-2717 says that: Automatic irrigations systems generally over-water due primarily to insufficient reprogramming of the irrigation schedule by the operator as weather changes. Many studies have shown that Smart Controllers can dramatically reduce this over-irrigation, thereby saving significant quantities of water and reducing urban runoff. The Irrigation Association defines a Smart Controller as climate-based or sensor-based controllers that automatically adjust for local weather and site conditions. Once the initial set-up and monitoring is complete, there is no need to reset the controller, or even turn it off for the winter. Smart Controllers make those adjustments automatically. Weather based controllers are not necessarily Smart Controllers. Recommendation: Require Smart Controller technology using the current Center for Irrigation Technology (CIT) testing protocol and as designated on the Irrigation Association website. In addition, central irrigation control systems such as those used in golf courses and other large landscapes which are not currently being tested under the smart controllers testing protocol, should also be included as an approved irrigation control system.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (d)). The statute (Statutes of 2006 Chapter 559) directs DWR to include provisions for the use of automatic irrigation systems and irrigation schedules based on climatic conditions, specific terrains and soil types, and other environmental conditions. The Smart Controllers would meet the automatic irrigation controller definition in Section 491 (b) because it complies with these statutory criteria, among others. It is an example of the kind of controller the statute was meant to include. So there is no need to specifically identify it in the regulation.

G97 Summary of Comment 67:

Controller. Commenter stated that [it] “means an automatic timing device used to remotely control valves or heads to set an irrigation schedule infers a single device. Some irrigation control technologies incorporate the use of multiple components.” Commenter suggested the following revision “controller means an automatic timing device or assemblage of components used to remotely control valves or sprinklers to set an irrigation schedule.”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (d)).

It is not necessary to add the additional language “or assemblage of components”. A controller is a single device that operates the irrigation system, whereas auxiliary sensors provide information to the controller. For example, a sensor may interrupt the signal to the valves. But the sensor is not the controller.

The proposed name of the term has been modified from “controller” to “automatic irrigation controller” to reflect the language in the statute. The definition has been revised to better describe the function of the automatic controller. However, the revision is different than the commenter’s suggestion. Section 491. (b) *“automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.*

G98 Summary of Comment 44:

Drip Irrigation. Commenter stated that this definition has a “limit of 2 gallons per hour flow rate for emission devices. Drip irrigation as a category under an irrigation method should not be limited to the output in gallons per hour, if it is to also be a low volume irrigation system utilizing emission devices. There is an availability of emitter flow rates greater than 2 gallons per hour that can apply water effectively to a range of soil textures, including but not limited to, sandy types. Drip irrigation can be applied via above ground means as well as below ground water.”

Commenter recommended “replacing ‘equal to or less than two (2) gallons per hour’ with ‘with a flow rate measured in gallons per hour’; that this complements the definition of emitter item 14), as well as low volume irrigation (item 33), which includes drip irrigation.”

DWR Response: Accept. Drip irrigation emitters can have a flow rate greater than 2 gallons per hour. In response to this comment and to reflect the way drip irrigation functions, the definition has been modified and no longer specifies flow rates of emitters. The definition is renumbered as Section 491 (j).

G99 Summary of Comment 44:

Effective Precipitation. Commenter asked “Is not effective precipitation or usable rainfall the portion of total precipitation retained by soil that can be available for plants?”

DWR Response: Accept. The definition has been revised to reflect the definition used by the American Society of Agricultural and Biological Engineers and the Irrigation Association. Section 491 (l) “effective precipitation” or “usable rainfall” (*Eppt*) means the portion of total precipitation *which becomes available for plant growth.*

G100 Summary of Comment 44:

Emitter. Commenter stated that “after the word soil add ‘as’ and after ‘measured’ replace ‘as with in.’ ”

DWR Response: Reject. The definition has been modified, although not as requested by the commenter. Commenters request does not add clarity to the revised definition. The definition has been simplified to omit the flow rate of “gallons per hour” because there can be flow rates stated as other than gallons per hour.

G101 Summary of Comment 44:

Established Landscape. Commenter stated that “after the word site, add the words soil/soil media.”

DWR Response: Accept in part. The definition has been changed to replace the word “site” with “soil”. This definition is renumbered as Section 491 (n). The term “soil media” adds unnecessary detail.

G102 Summary of Comment 85:

Established Landscape. Commenter stated that [it] “means the point at which plants in the landscape have developed significant root growth into the native soil beyond the original planting hole. Generally, most plants are established after one or two years of growth”. This seems more descriptive of the goal of establishing a mature plant root system.”

DWR RESPONSE: Accept in part. The definition has been changed to replace the word “site” with “soil”. This definition is renumbered as Section 491 (n). This definition is somewhat subjective but is sufficiently descriptive. By adding the word “typically,” it also provides local agencies some flexibility when determining whether the landscape is established.

G103 Summary of Comment 44:

Establishment Period. Commenter stated that “not all projects are built and maintained under the same parameters of the stated timelines due to the type of project. Establishment may take longer than 1 or 2 years, depending on project owners and those that are to take over the projects. Suggest inserting generally in front of means.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (k)). However, there is a minor modification to this definition which is renumbered Section 491 (o). The word “typically” refers to the fact that plant establishment does not take place 100% of the time in one to two years. There can be occasions where the plants are slow to establish, for example, when there are poor soil conditions, harsh weather, pest problems and vandalism. In these cases, the plant establishment period may be longer than one or two years and the irrigation schedule should reflect that.

G104 Summary of Comment 163:

Establishment Period. Commenter stated that “there does not seem to be any recognition in the ordinance for the establishment period of a water efficient landscape. Water use may actually increase during the first one to three years when you are installing a native landscape, and so the amount of water that is actually needed would go up. Whereas over the longevity of it, after that third year, you could actually see the water almost actually being completely turned off. So there needs to be recognition particularly during that first part and to establish a healthy garden environment, that water rates may need to increase.”

DWR Response: Reject. The Estimated Water Use is based on the landscape coefficient of the plants chosen. This is the water budget that is more closely indicative of the actual water needs of the chosen plants. The MAWA, or Maximum Applied Water Allowance is the water budget based

on an Evapotranspiration Adjustment Factor of 0.7 and is the water budget used in the design phase. The MAWA allows enough irrigation water for the planting of 1/3 high water using plants, 1/3 moderate water using plants and 1/3 low water using plants. Since the commenter is talking about low water using plants such as many California natives that can live with very little water after establishment, the MAWA with an Evapotranspiration Adjustment Factor of 0.7 will be not difficult to achieve because many of these referenced plants have plant factors below 0.5. Therefore there is no need to create a larger establishment water budget. The MAWA will have sufficient water allowed for both the establishment phase and the ongoing life of the landscape. It is true that newly transplanted plants will need irrigation water more frequently while the root system is small (essentially the size of the nursery container). As the plant grows and becomes established the root system enlarges and can capture more of the water available in the soil profile. So it not that newly transplanted plants need much more water applied, they need small amounts more frequently. This is an irrigation scheduling matter. The Model Ordinance recognizes and encourages the use of low water using plants to create water efficient landscapes.

G105 Summary of Comment 150:

Establishment Period. Commenter stated that “there does not seem to be recognition in this document that water use may increase during the establishment period (1 to 3 years) of a drought tolerant landscape. After that establishment period, the landscape would then be more efficient, and recognition of that is vital.”

DWR Response: Reject. The Estimated Water Use is based on the landscape coefficient of the plants chosen. This is the water budget that is more closely indicative of the actual water needs of the chosen plants. The MAWA, or Maximum Applied Water Allowance is the water budget based on an Evapotranspiration Adjustment Factor of 0.7 and is the water budget used in the design phase. The MAWA allows enough irrigation water for the planting of 1/3 high water using plants, 1/3 moderate water using plants and 1/3 low water using plants. Since the commenter is talking about low water using plants such as many California natives that can live with very little water after establishment, the MAWA with an Evapotranspiration Adjustment Factor of 0.7 will be not difficult to achieve because many of these referenced plants have plant factors below 0.5. Therefore there is no need to create a larger establishment water budget. The MAWA will have sufficient water allowed for both the establishment phase and the ongoing life of the landscape. It is true that newly transplanted plants will need irrigation water more frequently while the root system is small (essentially the size of the nursery container). As the plant grows and becomes established the root system enlarges and can capture more of the water available in the soil profile. So it not that newly transplanted plants need much more water applied, they need small amounts more frequently. This is an irrigation scheduling matter. The Model Ordinance recognizes and encourages the use of low water using plants to create water efficient landscapes.

G106 Summary of Comment 44:

ET Adjustment Factor. Commenter requested to “replace the words needs to be with the word is.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (n)). However, there is a minor modification to this definition which is renumbered Section 491 (q). The comment does not add clarity since it will not substantively alter the sentence’s meaning. “Needs to be” also implies some flexibility and is less prescriptive. The request would provide a different meaning to the definition. “Needs to be”

reflects the water required by the plant. “Is” reflects any amount of water applied, regardless of plant demand.

G107 Summary of Comment 90:

ET Adjustment Factor: Commenter stated that “DWR is proposing to reduce the ET Adjustment factor from 0.8 to 0.7 as a measure of water efficiency. 0.8 is an effective and aggressive factor for our area as we are working to reduce the factor from 1.0 to .8. Further reductions will not be feasible.”

DWR Response: Reject. See the DWR’s White Paper regarding lowering the ETAF, which provides in depth justification for this decision. Many researchers and landscape professionals and the Landscape Task Force Irrigation workgroup agree that the ETAF can be lowered by installing, managing and maintaining efficient irrigation systems. Numerous commenters support the lowering of the ETAF to 0.7.

G108 Summary of Comment 44:

Flow Rate. Commenter stated that “after the words flows through add water use equipment.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (p)). There is a minor modification to this definition which is renumbered Section 491 (s). The comment does not add clarity to the definition because the added phrase would be redundant and add no substantive meaning. Adding the phrase might be read as restricting the provision’s definition to solely water use equipment, which is not intended. The comment does not add clarity to the definition. Pipes, valves and emission devices are the types of “water use equipment” through which water would flow.

G109 Summary of Comment 44:

Hydrozone. Commenter requested to “remove [hydrozone] with the same irrigation schedule. Not all hydrozones, though having the same water use classification plants (low, medium or high), and watered by separate valve/s, may have the same watering schedule. Not all conceivable scenarios with watering schedules can be covered, due to site details and therefore should not be part of this definition.”

DWR Response: Accept in part and reject in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 491 (q)). However, there is a minor modification to this definition. The section is renumbered as Section 491 (v). This definition has been clarified to include both irrigated and non-irrigated areas in response to the comment. Providing more specifics could inadvertently restrict the definition so as to make it less functional or flexible.

G110 Summary of Comment 44:

Irrigation Efficiency. Commenter stated that “since irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices, it can be the applicant’s judgment or an agency’s determination of the accuracy of a derived efficiency. Example of calculations at the end of the package alludes to this as assumptions.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (s)). There is no change to this definition which is renumbered Section 491 (y). Irrigation efficiency is determined from distribution uniformity published by manufacturers and management efficiency developed by irrigation professionals and cited in the

ETAF White paper. Therefore irrigation efficiency is not determined by applicants or local agencies, but by irrigation professionals. DWR relies upon this expertise and has determined the minimum allowable average (IE), for purposes of this Ordinance, is 0.71. This value is based on published professional articles on irrigation management efficiency, as stated in the DWR ETAF white paper.

G111 Summary of Comment 90:

Irrigation Efficiency. Commenter stated that “irrigation efficiencies of 0.71 are very aggressive. Current requirements of 0.625 are a challenge to meet in most installations as it is. This is not a feasible target.”

DWR Response: Reject. See the DWR’s White Paper regarding lowering the ETAF. Many stakeholders’ comments take the opposite position to this commenter. The 0.71 irrigation efficiency is an average over the efficiency shown over various types of equipment. An efficiency rating of 0.71 may not be expected with spray irrigation but an efficiency of drip may be over 90%, therefore the average efficiency of 0.71 is attainable with a varied plant mix and appropriate technology. The overarching purpose of this update is to conserve water state-wide. Lowering the ETAF is one of the most effective ways to accomplish that legislative goal.

G112 This response was not revised.

G113 Summary of Comment 5:

Landscape Area. Commenter stated that “it is our understanding that this proposed ordinance does not apply to agricultural related activities. However, under Section 491, Definitions #27, titled “landscape area”, the last sentence refers to areas permanently and solely devoted to edible plants such as orchards and vegetable gardens as being subject to the MAWA. This is confusing. This reference appears on its face to be an area devoted to agricultural activities to which these proposed regulations do not apply. Agricultural activities; commercial or private, large or small, should not be subject to this regulation. Please provide clarification. Also, the preceding sentence states what is “not” included in the landscape area. This sentence should be at the end of the definition so that we are not reading what is a landscape area, then what is not, then what is again.”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (u)). The definition was modified and renumbered as Section 491 (dd) to include landscapes with food producing plants, and to exclude commercial agricultural references. Landscapes comprised of edible plants have a higher water budget than solely aesthetic landscapes.

G114 This response was not revised.

G115 Summary of Comment 14:

Landscape Area. Commenter stated that “landscape area only allows 10% of the pervious, non-irrigated planting areas to be counted toward water allowance. I think there should be a higher allowance so that there is encouragement to use pervious surfaces instead of solid planting. This might help allow for a small, useable lawn area surrounded by a large decomposed granite perimeter with drip irrigated plants. If this stays at 10% I would be encouraged to plant as much area as possible to increase my water allowance. This is counter to the goal.”

DWR Response: Accept in part. The definition was changed and renumbered as Section 491 (dd) to remove the 10% non-irrigated allowable area based on the comments received.

G116 This response was not revised.

G117 Summary of Comment 58:

Landscape Area. Commenter stated that “we strongly disagree with this definition and believe that pervious non-irrigated areas should be allowed as part of the landscape area. Only 10% of non-irrigated allowable area unnecessarily limits the designer's creativity for compliance. This is a narrow-minded definition and is based on old and outdated design methodology. If two projects each have 10,000 square feet of pervious landscape area then they both should be given the same water budget. The way the document is written if one designer uses no pervious non irrigated surfaces then they are allowed to use more water on their site than another designer that includes a wood deck, succulent garden or decorative dry stream bed, in fact, this will increase water use in projects because it provides a disincentive to using succulent gardens and other non-irrigated landscape solutions. This is also simply not fair and unnecessarily constraint design creativity. The definition of landscape area should include pervious surfaces WITHOUT limitation.”

DWR Response: Accept in part. The definition was changed and renumbered as Section 491 (dd) to remove the 10% non-irrigated allowable area based on the comments received.

G118 This response was not revised.

G119 Summary of Comment 59:

Landscape Area. Commenter stated that “it's important that DWR's use of terms of art and other nomenclature be consistent with the established use in practice by industry. 1. Landscape Area: The definition of landscaped area is ambiguous and will result in confusion on how to calculate the area subject to MAWA By limiting the square footage of pervious non-irrigated planting areas, it is not clear if all areas that are not wetted areas should be excluded. Stakeholders suggest the definition Is irrigated area, In lieu of incorporating non-Irrigated design elements. Conceivably, two otherwise identical sites could be subject to very different water budgets. The proposed definition may discourage the use of natural plants that do not require supplemental irrigation. It should be made clear that the calculated landscape area shall be used to determine both the applicability of the site to the requirements of the ordinance and the MAWA. The following definition of Landscape areas should be used: The entire parcel less the building footprint, driveways, non-irrigation portions of parking lots, hardscapes such as decks and patios, and other non-porous areas. Water features are included in the calculation of the landscaped area. Areas dedicated to edible plants such as orchards or vegetable gardens are not included”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (u)). The definition was changed and renumbered as Section 491 (dd). Because water features use water like planted areas they are included in the calculation to account for all water use. If the area is planted, it is part of the landscape area.

G120 Summary of Comment 83:

Landscape Area. Commenter stated that “our endorsement of the .7 ETAF budget, however, is contingent on a fair and reasonable definition of “Landscape Area.” Currently, the proposed definition will act as a disincentive for water conservation and most assuredly, will result in a

number of inequities. We believe very strongly that the definition of “Landscape Area” should include pervious areas such as dry streambeds, non-irrigated succulent gardens or native landscape, as well as decks and other decorative features. Our landscapes should not be designed by formula. Please allow the talented designers in our state the flexibility to comply in many unique and interesting ways.”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (u)). The definition was changed and renumbered as Section 491 (dd). DWR has revised the section to include a list of areas that, if they are within the planting area, they are part of the landscape area calculation. Decks are nonliving surfacing and should not be included in the calculation of the water budget. Plants growing on the deck in containers can be counted as part of the landscape area.

G121 Summary of Comment 77:

Landscape Area. Commenter stated that “landscaping planted on slopes should be excluded from the total landscaped area because the landscaping is necessary for erosion control and the prevention of water pollution.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (u)). The definition was changed and renumbered Section 491 (dd). DWR has elected not to exempt landscaping on slopes because determining slope could be subjective and lead to inequitably applying the section. If the area is planted, it is part of the landscape area and subject to MAWA.

G122 Summary of Comment 85:

Landscape Area. Commenter stated that “change to one hundred percent of non-irrigated planting areas in a landscape design plan should be included in the definition of landscape area. Excluding non-irrigated areas would encourage owners to irrigate property when they might otherwise be inclined to leave portions of the property unirrigated. The spirit of this definition could be easily evaded by running drip line into the non-irrigated area. If an owner decides not to irrigate a portion of a landscape, he or she should receive "credit" for that and be allowed to apply a little more water than otherwise on the irrigated areas, as long as he or she stays under the overall water budget. Allowing owners to include 10 percent of the non-irrigated planting area in the landscape area requires one more computation in an already overly complicated process. Finally, it should be pointed out that the AB 2717 Task Force did not recommend that non-irrigated planting areas in a landscape design plan be excluded from the definition of landscape area; it recommended that "areas designated for non-development by the local land use agency" be excluded. CLCA suggests that the first part of the definition be changed to something like the following: Landscape area includes all of the porous areas as well as water features in a landscape design plan...”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (u)). The definition was changed and renumbered as Section 491 (dd) to include, as suggested by the commenter, non-irrigated areas designated for non-development. DWR also removed the 10% non-irrigated allowable area to provide additional landscape area flexibility. Planted areas, both irrigated and non-irrigated are part of the landscape area. Planted areas are differentiated from non-planted, non-developed areas such as open space where any existing vegetation is non-irrigated and allowed to remain in its natural state.

G123 Summary of Comment 105:

Landscape Area. Commenter stated that [it] “has been defined to include a maximum of 10% of non-irrigated areas, rather than the more widely accepted definition of all areas that could be planted. This will greatly reduce the water budget.”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (u)). The definition was changed and renumbered as Section 491 (dd) to remove the 10% non-irrigated allowable area to provide additional landscape area flexibility.

G124 Summary of Comment 14:

Low Volume Irrigation. Commenter stated that “this is defined as having a flow rate of 0.75 per hour. Flow rate is not defined. Is it the amount coming out of nozzle, or the precipitation rate of the triangular spaced system? If it is the precipitation rate, this will allow most rotor type sprinklers, so slopes can be irrigated with rotors. If flow rate defines the volume coming out of the nozzle, then inches-per-hour is not the right unit to use to measure this.”

DWR Response: Accept in part. The definition of low volume irrigation was modified and renumbered Section 491 (kk). Flow rate is defined in the existing regulation as the amount of water that flows through pipes, valves and emission devices at a given rate, not the precipitation rate. (California Code of Regulations, Title 23 Section 490 (p) and renumbered Section 491 (s) in the modified text of the regulations). The definition does not include an inches per hour flow rate calculation. It pertains to irrigation technology that delivers water at low pressure such as drip, inline drip and similar technology measured in gallons per minute or hour, or cubic feet per hour. Irrigation manufacturers provide flow rates of emission devices, (per device) not that of constructed irrigation systems such as triangular spaced system.

G125 Summary of Comment 44:

Low Volume Irrigation. Commenter stated that “this definition refers to a type of system. This is a confusing definition for ‘low volume irrigation’ and should be simplified and revised to work with and complement low flow devices which encompass the types stated in the definition, and not mention precipitation rate (for example of volume output, see item 14, page 5 for emitter). (Check current definition): It is the ‘precipitation’ rate that occurs in inches per hour, not ‘flow’ rate (see definition of flow rate under item 23, page 5). (After the word) including, (add): surface and above surface. There are low flow technologies/devices available that do not fit in the category of ‘rotor sprinkler, impact sprinkler, bubbler and spray sprinkler’ that provide irrigation effectively with little or no ponding or run-off. Yet when placed in a system they can have precipitation rates that exceed the stated 0.75 inches per hour, and still meet or have a slower percolation rate than the infiltration rate of the soil/soil media. Coarse sandy soils for example, have up to a 2 inch per hour infiltration rate.”

DWR Response: Accept in part. The definition of low volume irrigation was modified and renumbered Section 491 (kk). This definition was originally defined based on stakeholder input. Flow rate is defined in the existing regulation as the amount of water that flows through pipes, valves and emission devices at a given rate by volume, not the precipitation rate which is measured as inches applied water over a given area. These are not the same. (California Code of Regulations, Title 23 Section 490 (p) and renumbered Section 491 (s) in the modified text of the regulations). The definition does not include an inches per hour flow rate calculation. It pertains to irrigation

technology that delivers water at low pressure such as drip, inline drip and similar technology measured in gallons per minute or hour, or cubic feet per hour.

G126 Summary of Comment 20:

Low Volume Irrigation. Commenter stated that “means any irrigation system with a flow rate equal to or less than 0.75 inches per hour, including drip irrigation, subsurface drip, micro-sprinklers and similar irrigation type. Issue: Low volume irrigation as defined above cannot meet the precipitation rate of 0.75 inches per hour. Low volume does not mean low precipitation rate. Precipitation rate (PR) for irrigation devices is determined by the universal formula where the PR is equal to 96.3 times the flow in GPM divided by the area of coverage. Drip irrigation, subsurface drip and micro-sprinklers do not pass the precipitation rate test. Consider the following: A one gallon per hour drip emitter applying water in a one foot square area will have a PR of 1.6 inches per hour. A 0.4 gallon per minute full circle micro spray spaced at 5 feet on center will have a PR of 1.54 inches per hour. A 0.9 gallon per hour sub-surface drip with emitters spaced 12” on center with 12. Between rows will have a PR of 1.44 inches per hour. A 3.7 gallon per minute full circle spray spaced at 15 feet on center will have a PR of 1.58 inches per hour which is lower than a drip emitter. A 7.58 gallon per minute full circle rotor spaced at 35 feet on center will have a PR of only 0.60 inches per hour which is much lower than a drip emitter. A 29.4 gallon per minute full circle rotor spaced at 75 feet on center will have a PR of only 0.50 inches per hour which is much lower than all of the sprinklers noted above.” Commenter makes the following recommendation: “Consider removing low volume irrigation from the definitions and from requiring low volume irrigation from the text of the ordinance and requiring the use of proper irrigation devices as determined by the designer of the irrigation system.”

DWR Response: Accept in part. The definition of low volume irrigation was modified and renumbered Section 491 (kk). This definition was originally defined based on stakeholder input. The designer is free to choose the appropriate technology. Flow rate is defined in the existing regulation as the amount of water that flows through pipes, valves and emission devices at a given rate, by volume, not the precipitation rate which is measured as inches of applied water over a given area. Flow rate and precipitation rate are not the same. (California Code of Regulations, Title 23 Section 490 (p) and renumbered Section 491 (s) in the modified text of the regulations). The definition does not include an inches per hour flow rate calculation. It pertains to irrigation technology that delivers water at low pressure such as drip, inline drip and similar technology measured in gallons per minute or hour, or cubic feet per hour.

G127 Summary of Comment 112:

Low Volume Irrigation. Commenter stated that “we oppose or suggest modification of #33. List of acceptable low volume devices below .75 inches per hour should include multi stream low volume rotating .4 inches per hour heads.”

DWR Response: Accept in part. The definition of low volume irrigation was modified and renumbered Section 491 (kk). This definition was originally defined based on stakeholder input. The designer is free to choose the appropriate technology. Flow rate is defined in the existing regulation as the amount of water that flows through pipes, valves and emission devices at a given rate, by volume, not the precipitation rate, which is measured as inches applied water over a given area. Flow rate and precipitation rate are not the same. (California Code of Regulations, Title 23 Section 490 (p) and renumbered Section 491 (s) in the modified text of the regulations). The definition does not include an inches per hour flow rate calculation. It pertains to irrigation

technology that delivers water at low pressure such as drip, inline drip and similar technology measured in gallons per minute or hour, or cubic feet per hour .

G128 Summary of Comment 67:

Low Volume Irrigation. Commenter stated that “defines low volume irrigation as any irrigation system with a flow rate equal to or less than 0.75 inches per hour, including drip irrigation, subsurface drip, micro-sprinklers and similar irrigation type. Flow rate is traditionally referenced in unit volume over time, such as gallon per minute or gallons per hour. Inches per hour generally references precipitation rate and 0.75 inches per hour is not reflective of a low volume system.”

Commenters recommended striking this definition and all reference to it; or alter the terminology.

DWR Response: Accept in part. The definition of low volume irrigation was modified and renumbered Section 491 (kk). This definition was originally defined based on stakeholder input. This definition was originally defined based on stakeholder input. The designer is free to choose the appropriate technology. Flow rate is defined in the existing regulation as the amount of water that flows through pipes, valves and emission devices at a given rate by volume, not the precipitation rate, which is measured as inches applied water over a given area. Flow rate and precipitation rate are not the same. (California Code of Regulations, Title 23 Section 490 (p) and renumbered Section 491 (s) in the modified text of the regulations). The definition does not include an inches per hour flow rate calculation. It pertains to irrigation technology that delivers water at low pressure such as drip, inline drip and similar technology measured in gallons per minute or hour, or cubic feet per hour.

G129 Summary of Comment 85:

Low Volume Irrigation. Commenter stated that “define this according to the volume of water per minute or hour rather than inches of water per hour. The amount of water moving through the irrigation device is more important for a definition of the device than the amount of water that is actually applied.”

DWR Response: Accept in part. The definition of low volume irrigation was modified and renumbered Section 491 (kk). This definition was originally defined based on stakeholder input. The designer is free to choose the appropriate technology. Flow rate is defined in the existing regulation as the amount of water that flows through pipes, valves and emission devices at a given rate, by volume, not the precipitation rate which is measured as inches applied water over a given area. Flow rate and precipitation rater are not the same. (California Code of Regulations, Title 23 Section 490 (p) and renumbered as Section 491 (s) in the modified text of the regulations). The definition does not include an inches per hour flow rate calculation. It pertains to irrigation technology that delivers water at low pressure such as drip, inline drip and similar technology measured in gallons per minute or hour, or cubic feet per hour

G130, G131, G132, G133, G134 These responses were not revised.

G135 Summary of Comment 44:

Precipitation Rate and Low Volume Irrigation. Commenter stated that “this definition can be likened to application rate when devices are incorporated in a system design. Likewise, a precipitation rate of a single device can be different than a precipitation rate in a system with more than one device in it. Since all these emission devices stated in the definition are devices with outputs measured in gallons per hour, and that these can be spaced at various distances in a system

design, precipitation rates are irrelevant. Delete (after the word) system: “with a flow rate equal to or less than 0.75 inches per hour. The definition should read: low volume irrigation means any irrigation system including surface and above surface drip irrigation, subsurface drip, micro-sprinklers and similar irrigation type.”

DWR Response: Reject. There is no change to the definition of precipitation rate, which is renumbered as Section 491 (xx) and is consistent with the definition used by the Irrigation Association. The irrigation equipment manufacturers give the precipitation rate per emission device in a system. (xx) *“precipitation rate” means the rate of application of water measured in inches per hour.*

The definition of low volume irrigation (Section 491 (kk) was originally defined by stakeholder input and has been modified to better explain what low volume irrigation is and how it works. (kk) *“low volume irrigation” means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.*

G136 Summary of Comment 67:

Rain Sensor. Commenter requested to “define rain sensor and soil moisture sensor, respectively and therefore, create the possibility of discriminating between platforms of technology.”

Commenter suggested incorporating a definition of “moisture sensing technology that suspends or limits irrigation application in periods of sufficient moisture or rainfall and replace ordinance text where appropriate.”

DWR Response: Reject and accept parts. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (zz)) and has been revised to clarify that a rain sensor or a rain sensing shutoff device should suspend irrigating when it rains. Soil moisture sensors are defined in Title 23 Section 490 (ggg).

G137 Summary of Comment 85:

Rain Sensor. Commenter stated that “change means a component which automatically suspends the irrigation event when measurable rain occurs. These devices can be set for different amounts of rainfall.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (ee)). There is no change to this definition which is renumbered Section 491 (zz). The change suggested by the comment does not clarify the definition since the suggestion, that these devices can be adjusted for rainfall intensity, is common knowledge.

G138 Summary of Comment 44:

Record Drawing. Commenter stated that “after the words drawings which show add: the work as installed, including exact information of. After the words in the field add: dimensioning.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (ff)). There is no change to this definition which is renumbered Section 491 (yy). The existing definition describes the required documentation. It is not feasible for DWR to describe all the possible types of changes described in a record drawing. Local agencies may revise this definition to suit local conditions.

G139 Summary of Comment 85:

Record Drawing. Commenter stated that “change record drawing or as-builts to - mean a set of drawing which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor....All drawings are reproducible.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (ff)). There is no change to this definition which is renumbered as Section 491 (aaa). The comment does not add clarity since the sole relevant addition is that drawings should be reproducible. That can easily be accomplished in this technologically advanced age without stating it in a regulation. Even so, the word “reproducible” is stated in the first few words of the definition.

G140 Summary of Comments 58, 83:

Recreation Area. Commenter stated that “this definition reads, in part, where turf provides a playing surface or serves other high-use recreation purposes. As noted in Section 490, passive recreation areas are of equal importance to -- as active recreation areas. Our parks are the highest and best public use of our water resources and, therefore, should be highly valued. The importance of passive recreation has been well documented with studies by Dr. Roger Ulrich and others that have correlated exposure to outdoor environments and nature with human well being and health. The importance of passive recreation has been well documented and is important to our quality of life. Limited turf areas on private properties where it is used only for decoration is appropriately regulated. However, it can be argued that our parks are the highest and best public use of our water resources and therefore, should be highly valued. The definition of recreation area must be expanded to include passive recreation areas, as well as active.”

DWR Response: Reject. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (gg)). However, minor modifications were made to this definition renumbered Section 490 (zz) to clarify that parks are recreational areas but that recreational areas were not meant to include aesthetic or unused turf areas.

In this Ordinance, the term “Recreation Area” designates areas that need additional water because of heavy foot traffic and machinery; it has nothing to do with human health. The words “active” and “passive” are subjective and local agencies may view these terms differently. The amount of use of recreation areas will vary from day to day, time of year, depending on the intended function of the area and size of the community. If a given area is designated by the applicant and the local agency as a recreation area, the ETAF of 1.0 applies.

G141 Summary of Comment 59:

Recreation Area. Commenter stated that “this should be further defined. Parks are often defined as ‘passive recreation or active recreation’ While a passive area may not be a surface for high use recreation, they are intended to allow spontaneous play and informal activities (parties, carnivals, public events, etc). These areas will need to be turf and will most likely require the higher ET. Both passive and active recreation areas should be included in the definition.”

DWR Response: Reject parts and accept parts. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (gg)). However, minor modifications were made to this definition renumbered as Section 491 (zz) to clarify that parks are recreational areas but that recreational areas were not meant to include aesthetic or unused turf areas.

The words “active” and “passive” are subjective and local agencies may view these terms differently. The amount of use of recreation areas will vary from day to day, time of year, depending on the intended function of the area and size of the community. If a given area is designated or accepted by the applicant and local agency as a recreation area, the ETAF of 1.0 applies.

G142 This response was not revised.

G143 Summary of Comment 50:

Rehabilitated Landscape. Commenter stated that “this definition is too broad and would cause individual homeowners with minor re-landscaping projects to be affected by the MO.

Applicability to rehabilitated landscapes should be included in the definition.”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (jj)). However, modifications were made to this definition renumbered as Section 491 (eee) to clarify that it applies to areas equal to or greater than 2500 sq ft. To avoid the consequence the commenter intimates, DWR modified the provision so that small homeowner projects would fall below this threshold.

G144 Summary of Comment 44:

Swing Joint. Commenter stated that “after the word sprinkler add [the word] emission device.”

DWR Response: Accept in part. This definition has been modified to include “emission device” because it clarifies the provision’s meaning and intent. It was renumbered as Section 491 (mmm). This definition has been clarified; the word “sprinkler” has been replaced with “emission device”.

G145 Summary of Comment 44:

Valve. Commenter stated that “replace the word emitters with the words emission devices” and “after the words in a line add the word common.”

DWR Response: Accept in part. This definition is part of the existing regulation (California Code of Regulations, Title 23 Section 490 (rr)). However, modifications were made to this definition renumbered as Section 491 (mmm) to delete the word “emitters”. The proposed definition has been revised with different language than suggested by the commenter because the commenter’s wording could have been too narrowly construed.

The definition has been modified so that the referenced sentence has been omitted.

G146 Summary of Comment 59:

A commenter requested to add “the following definitions should be added: contract documents, flow sensor, master control valve, sub-meter, operating pressure, control system.”

DWR Response: Reject. The Department determined that it is not necessary to add all of these additional terms. “Contract documents”, “master control valve”, “sub-meter”, “control system” are not used in the Ordinance and therefore do not require a definition. “Operating pressure” is defined. “Flow sensor” is defined in the irrigation design plan 492.7 (a) (1) (G).

G147 Summary of Comment 79:

A commenter requested to “add compost, healthy soil, humus, and soil organic matter” and commenter provides suggested definitions.

DWR Response: Reject. It is not necessary to define the terms “healthy soil” or “humus” because these terms are not used in the Ordinance. The term “compost” has been added to the list of specified, acceptable mulching material [Definitions Section 491 (pp)]. Defining every acceptable mulching material is excessive for the purposes of this Ordinance. The only time the term “organic matter” is used in the Ordinance is in the soil management report [Section 492.5 (a)(1)(B) 6]. This is a common item in soil analysis. If further definition is required, the applicant may consult the laboratory conducting the analysis.

G148, G149 These responses were not revised.

Section 492.1 Compliance with Landscape Documentation Package and Section 492.3 Elements of the Landscape Documentation Package (LDP)

G150 Summary of Comment 38, 114:

Commenters suggest that the entire Landscape Documentation Package be submitted to the local water purveyor because it provides important information, including irrigated area measurements.

DWR Response: Reject. The Water Efficient Landscape Worksheet, not the Landscape Documentation Package, provides the information regarding water budgets, the information most useful to a water purveyor. A local agency may choose to include an additional provision in its Ordinance, such as, requiring the project applicant to submit a copy of the entire Landscape Documentation Package to the water purveyor.

G151 Summary of Comment 59:

Commenter stated that “the required documentation needs to be reduced and streamlined. All that is needed is one worksheet demonstrating MAWA compliance, a landscape design plan, an irrigation design plan, a grading plan for reference, and a soil analysis report. A copy of the Water Efficient Landscape Worksheet should be submitted to the local retail water purveyor by the local agency instead of the applicant to ensure that the retail water purveyor receives the final approved worksheet.”

DWR Response: Accept. The required documents for the Landscape Documentation Package have been modified and streamlined for clarity and efficiency. The modified list of required documents is: a Project Information Sheet, Water Efficient Landscape Worksheet, Soil Management Plan, Landscape Design Plan, Irrigation Design Plan and Grading Design Plan. The Ordinance has been modified so that the local agency and the applicant are both required to submit the Water Efficient Landscape Worksheet to the water purveyor. This change is intended to lead to more cooperation between these entities and provide a means toward increased water conservation.

G152 Summary of Comment 74, 133, 140:

Multiple commenters stated that cities do not have the resources, expertise or the ability to comply with the provisions of the Landscape Documentation Package. The City will either have to hire a consultant to review the technical requirements or send staff to training.

DWR Response: Accept in part. The requirements for the Landscape Documentation Package have been modified and streamlined. The Department encourages cooperation between local agencies and water purveyors to provide a means toward increased water conservation. Section 492 (a) *A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.*

G153 Summary of Comment 77, 109

Commenters stated that the Landscape Documentation Package is too complex for the average homeowner to submit without expensive technical assistance.

DWR Response: Accept in part and reject in part. The Landscape Documentation Package has been simplified and streamlined. This change is intended to lead to more cooperation between these entities and provide a means toward increased water conservation. The applicability to homeowner provided landscapes has been modified, but not removed, from the Ordinance. The square footage threshold was increased from 2,500 square foot to 5,000 square foot for homeowner provided landscape projects to make it less onerous to homeowners who must comply with the provision. Rehabilitated landscapes that are homeowner provided are no longer subject to the provisions of section 492 through 492.17. Urban landscapes account for significant amounts of outdoor water use in California (30-50 percent) and the Department supports provisions targeting this sector.

G154 Summary of Comment 140:

492.1 (c)(2) states that prior to construction, the project applicant shall submit a copy of the approved landscape documentation package to the property owner or his/her designee. According to the definition set forth in the ordinance, a "project applicant" may be the property owner or his/her designee.

DWR Response: Reject. In the case where an applicant is the property owner, this requirement is automatically met. It is not necessary to modify the Ordinance to specifically state this.

G155 Summary of Comment 167:

Commenter stated that there is no clear distinction in the landscape ordinance for cities that do not have water departments. Cities would have to approve the landscape design from a planning standpoint, and water purveyors would then be required to perform complicated irrigation audits.

DWR Response: Accept in part and reject in part because the Department encourages cooperation between local agencies and water purveyors in Section 492 and 493: *"A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance."* Also, mandatory audits for existing landscapes have been removed from the Ordinance requirements to simplify compliance.

Waivers & Variances
(Deleted Sections in the Modified Text)

G156 Summary of Comment 59:

A commenter stated that Section 492.3 “does not provide specific criteria for a waiver or variance and requests clarification.”

DWR Response: Accept. This section was removed from the modified text of the proposed regulation. The Model Ordinance is intended for statewide use and cannot take into account the wide variety of local conditions. Local agencies are responsible for developing criteria for waivers and variances that are specific to the local conditions.

G157 This response was not revised.

Section 492.2 Penalties

G158 Summary of Comments 38, 59, 74, 98, 140:

Multiple commenters suggested deleting termination of water service as a penalty because local agencies do not supply water and lack authority to terminate water service and local agencies do not own the water meter. In addition, there are public health concerns and equity issues associated with termination of water service where termination would not be merited based on landscape water use. Other commenters asserted that housing codes require properties to have water and other services.

DWR Response: Accept. This section was modified significantly so that local agencies have discretion to implement the type and scope of any penalty provisions in their local ordinances. The Model Ordinance is intended for statewide use and cannot take into account the wide variety of local conditions. Penalties, waivers and variances are best decided at the local level. The modified text now reads:

§ 492.2 Penalties. (a) A local agency may establish and administer penalties to the project applicant for non-compliance with the ordinance to the extent permitted by law.

G159, G160, G161 These responses were not revised.

G162 Summary of Comment 81, 152:

Commenters suggest applying substantial price increases, imposing fines or installing flow meters for usage that exceeds MAWA.

DWR Response: Reject. The statute, AB1881, Statutes of 2006, Chapter 559, is directed to the local agencies (cities and counties), not to water purveyors. Local agencies often do not provide water and would be unable to institute the specific penalties suggested in the comment. However, it should be noted that this section was modified significantly so that local agencies have discretion to implement the type and scope of any penalty provisions in their local ordinances. The modified text now reads:

§ 492.2 Penalties. (a) A local agency may establish and administer penalties to the project applicant for non-compliance with the ordinance to the extent permitted by law.

G163 This response was not revised.

G164 Summary of comment:

What are the penalties that could be imposed on a local agency for not implementing a local ordinance?

DWR Response: Reject. AB 1881, Statutes of 2006, Chapter 559, did not authorize DWR to stipulate penalties for local agencies that do not implement a local ordinance.

**Section 492.4 & Section 495.2
Water Efficient Landscape Worksheet**

G165 Summary of Comment 16, 20, 58, 85, 87, 111:

Commenter stated that the Water Efficient Landscape Worksheet is very complex and detailed suggested that “it seems more appropriate for the Model Ordinance to establish performance criteria rather than analysis, methodology, and providing calculation examples.” Another commenter stated that “the worksheet is too cumbersome, requires duplication of work already included in the landscape and irrigation design plan, and adds to the cost of preparing landscape and irrigation design plans without assuring any additional water savings.” Multiple commenters stated that the “requirement for a Water Efficiency Statement [Section B] is an unnecessary requirement and will not result in beneficial information; in contrast, the requirements under Section A (General Project Information), Section C (Water Budget Calculations) and Section D (Hydrozone Information) effectively provide necessary information to determine the water efficiency of the landscaped area

DWR Response: Accept in part and reject in part. The Water Efficient Landscape Worksheet has been streamlined. The general project information has been removed from this section and is now an element of the Landscape Documentation Package. The Water Use Efficiency Statement, the Effective Precipitation Estimate and Estimated Water Use requirements have been removed because based on comments, they were considered overly burdensome. The elements that remain in the Water Efficient Landscape Worksheet are (1) a hydrozone information table and (2) water budget calculations.

G166 Summary of Comment 44:

A commenter suggested the addition of temperature sensor at the end of the second paragraph after the words soil moisture sensor in Section 492.6 (3).

DWR Response: Reject. Temperature sensors are a part of CIMIS weather stations. Temperature sensors by themselves do not provide an estimate of evapotranspiration.

G167 Summary of Comment 79:

A commenter suggested “the addition of a new question on the Water Efficient Landscape Worksheet: What mulches or soil amendments were used to improve water retention and infiltration?”

DWR Response: Reject in part. The commenters suggested question would have been placed in The Water Efficiency Statement, a part of the Water Efficient Landscape Worksheet. However, the Water Efficiency Statement has been removed from the Landscape Worksheet. There is no longer an appropriate place for the commenter’s requested question.

However, in the Landscape Design Plan, there are provisions for identifying mulch and soil amendments:

492.6 (b) (6) *identify type of mulch and application depth;*

492.6 (b) (7) *identify soil amendments, type, and quantity;*

G168, G169 These responses were not revised.

G170 Summary of Comment 96

A commenter suggested in “Appendix B - Sample Water Efficient Landscape Worksheet to coordinate the list of plans with 492.8 (2) and others, i.e. Site Plan, Hydrozone Plan etc.”

DWR Response: Accept in part and reject in part. The Water Efficient Landscape Worksheet has been streamlined. The general project information has been removed from this section and is now an element of the Landscape Documentation Package. The Water Use Efficiency Statement, the Effective Precipitation Estimate and Estimated Water Use requirements have been removed because, based on comments, they were overly burdensome. The elements that remain in the Water Efficient Landscape Worksheet are (1) a hydrozone information table and (2) water budget calculations.

G171, G172, G173 These responses were not revised.

G174 Summary of Comment 25, 83:

Commenters stated that there was the lack of good scientific information on the water use of trees and shrubs and that more detailed studies were needed to quantify water use.

DWR Response: Reject in Part. Accept in part Plant water use estimates for this Model Ordinance are based on the University of California publication “Water Use Classification of Landscape Species” (WUCOLS). The publication developed plant water use factors for common landscape plants. Additional water use studies are desirable, but until more research data is available, WUCOLS is the best available information.

G175 Summary of Comment 15:

A commenter stated that the ETAF doesn’t work across the range of climates found in California.

DWR Response: Reject. ETAF is based on each local city’s historical potential evapotranspiration rate. Areas with high evaporative demand are permitted higher water use rates than areas with lower evaporative demand.

G176 This response was not revised.

G177 Summary of Comment 120:

A commenter stated that tiered rates would be more effective than the ETAF in reducing water use.

DWR Response: Reject. DWR does not have the authority to mandate tiered rates in the Model Landscape Ordinance. Water utility rate structures are regulated by the California Public Utilities Commission.

G178, G179, G180 These responses were not revised.

G181 Summary of Comment 64: Commenter stated that “what needs to happen is for the Model Ordinance to be rewritten to provide an end result in terms of maximum applied water application (MAWA) and not how to reach MAWA.”

DWR Response: Reject. The requirements in the Model Ordinance ensure that the landscape is designed and installed to be effectively irrigated within MAWA. DWR does not have the regulatory authority to require that local agencies and utilities track metered water use.

G182, G183 These responses were not revised.

G184 Summary of Commenter 67: Commenter stated that they object the use 0.7 in the MAWA formula (Section 492.6 (3) (a)); that MAWA that is quite complex in nature due to the cross referencing required; and that mathematical errors could be problematic for both regulated and regulator. Commenter suggested the following revision: Reference tables could be altered to provide per square foot MAWA based upon local climatic conditions thereby simplifying the process. The example provided would then be altered as follows: 50,000 sq. ft. x 22.1774 gals/sq.ft = 1,108,870 gals. yr.

DWR Response: Reject. DWR does not believe the MAWA calculation is that complex. Providing tables with MAWA calculated on sq. ft. basis would not simplify the calculation. At least two tables would have to be provided, one for regular landscape and the other for the special landscape areas. The tables provided would have to provide data for the majority of the cities in the state, which could make the Ordinance more difficult to understand and to comply with.

G185 Summary of 81: Commenter stated the following: “Modify the MAWA portion of the Model Ordinance to apply to all residences and the landscape portions of commercial establishments. For residences, develop a set of models for purveyors to apply in remotely creating a MAWA based on lot size. Then expect purveyors to monitor actual usage versus MAWA, apply very substantial price increase for usage that substantially exceeds MAWA (our District didn’t get much result from economic based signals until the upper rates blocks reached about 10x the base rate – about \$20+ per unit). For continued excessive and irresponsible usage that far exceeds MAWA without explanation purveyors should be expected to impose fines or install flow restrictors. The goal should be one of establishing a MAWA based water usage monitoring structure that can be created and monitored largely through computer tools using existing data bases.”

DWR Response: Reject. DWR does not have the regulatory authority to require that local agencies and utilities track metered water use. The local agency may adopt additional, specific or more stringent provisions than what the Model Ordinance contains to achieve greater water use efficiencies in landscapes.

Section 492.5 Soil Management Plan

G186, G187, G188, G189, G190, G191, G192, G193, G194, G195, G196, G197, G198, G199, G200, G201 These responses were not revised.

Section 492.6 Landscape Design Plan

G202 Summary of Comments 42, 56: Several commenters recommended deleting “Avoid fire-prone plant materials and mulches” because it conflicts with the mulch section and it does not promote water conservation.

DWR Response: Accept and reject parts. Statutes of 2006, Chapter 559 (AB 1881) required DWR to address wildfire concerns in the Model Ordinance. Section 492.6 (a) (1) (E) has been clarified to discourage highly flammable mulches such as straw in fire prone areas but not to eliminate them altogether for consistency with other provisions.

G203, G204 These responses were not revised.

G205 Summary of Comment 85: One commenter suggested referencing the California Invasive Plant Council (Cal-IPC).

DWR Response: Accept. California Invasive Plant Council is recognized as an authority on invasive plant species in California. Cal-IPC will be referenced in the modified text of the proposed regulation in Definitions Section 491 (x).

G206 This response was not revised.

G207 Summary of Comment 50: One commenter suggested that the criteria in Section 492.8 (a) (2) (A) and (B) would constrain a property owner's right to implement certain landscape concepts and that it would be cost prohibitive and impractical for individual homeowners to conduct long-term maintenance of these irrigation technologies.

DWR Response: Accept and reject in part. Section 492.8 (a) (2) (A) and (B) are updates to the existing regulation (California Code of Regulation Title 23, Section 492 (c) (6) (A): “*Special attention shall be given to avoid run off on slopes and to avoid overspray in planting areas with a width less than ten feet, and in median strips.*” 492.8 (a)(2)(A) and (B) are recommendations only. As irrigation technology improves, so does the ease of maintenance. Modifications were made to Section 492.8 to simplify the requirements and make the Model Ordinance less burdensome.

G208, G209, G210 These responses were not revised.

G211 Summary of Comment 44: One commenter suggested adding these provisions: “adjacent to non-permeable vehicular and pedestrian hard paved surfaces,” and “constructed structures and where practical and efficient.” The commenter suggests that effects of overspray and runoff can occur from turf of any size and can be inconsequential.

DWR Response: Reject. Statutes of 2006, Chapter 559 (AB 1881) require provisions to minimize overspray and runoff, no matter the location. Technology used must be able to irrigate without runoff or overspray. The statement “where practical and efficient” is subjective and may be misused as a potential loophole. Spray irrigation is allowed adjacent to permeable surfaces. Section 492.8 (a) (2) (A) and (B) are updates to the existing regulation (California Code of Regulation Title 23, Section 492 (c) (6) (A): *“Special attention shall be given to avoid run off on slopes and to avoid overspray in planting areas with a width less than ten feet, and in median strips.”*

G212, G213, G214, G215, G216 These responses were not revised.

G217 Summary of Comments 85, 87: Two commenters suggested deleting the requirement of drip or subsurface irrigation within 24” of non-pervious hardscape due to public safety issues, long-term pedestrian access, design limits, maintenance issues, plant issues and equipment issues. The commenters suggested advances in technology will solve problems with spray irrigation technology.

DWR Response: Accept and reject parts. Spray irrigation is allowed adjacent to pervious hardscapes and other pervious surfaces. Several commenters stated that they have no trouble implementing a setback to reduce runoff and overspray. Runoff and overspray create plant, maintenance and safety issues of their own. It is not practical to waste water and pollute watersheds while waiting for technology to catch up when an alternative exists. This provision has been modified to allow spray irrigation adjacent to permeable surfaces [Section 492.7 (a) (1) (S)].

G218, G219, G220, G221, G222, G223, G224, G225, G226, G227, G228, G229, G230, G231, G232, G233, G234 These responses were not revised.

G235 Summary of Comment 85: One commenting organization stated that they believe that recycled water normally should not be used as a source of water for water features.

DWR Response: Reject. Tertiary treated recycled water is filtered and disinfected. The commenter did not specify a reason why recycled water should not be used. The department knows that tertiary treated water is safe for casual contact (not drinking). Some local jurisdictions are already using tertiary water to irrigate and to fill ornamental water features

G236, G237 These responses were not revised.

G238 Summary of Comment 44: One commenter agreed with the horticultural benefits of mulch but is concerned with using mulch on slopes or near waterways where flow fluctuates. The commenter stated that studies have shown that mulching inhibits the nesting ability of ground nesting (beneficial) bees. The commenter recommended revising the mulch section to “indicating mulch application on flat areas up to a maximum slope gradient (to be stated), and where practical.” “This item needs to be revised to encompass various possible site situations and applications, as well as environmental impacts.” The commenter stated that mulching in hydro-seeded areas will smother the hydro-seed and suggests adding “or other low volume irrigation technology” after “drip irrigation”.

DWR Response: Accept and reject parts. The mulch requirement is part of the existing regulation (California Code of Regulations, Title 23 Section 492 (11)). Mulch has been shown to

reduce evaporation and weeds and is standard practice in most non-turf planting situations. Organic mulch will also improve soil condition. On slopes, a stabilizing mulching product may be substituted for loose mulch. The alternative (no mulching) on slopes would cause unchecked soil erosion. In hydro-seeded applications, the mulching product in the slurry is considered mulch. Landscaping (not habitat restoration) is usually not installed in an active streambed; in these cases the local agency may designate appropriate action. Concerns regarding mulch and bees are beyond the scope of the Notice of Proposed Rulemaking for the Model Ordinance. Drip irrigation is defined as a type of low volume irrigation. The comment would not add clarity.

G239 This response was not revised.

G240 Summary of Comment 92: One commenter stated that mulching would be counter productive to displays that are important examples of water conservative landscapes.

DWR Response: Accept and reject parts. The mulch requirement is part of the existing regulation (California Code of Regulations, Title 23 now numbered as Section 492.6 (a) (1) (E).

Modifications were made to the mulch requirements to allow for special planting situations, such as the commenter has referenced, where mulch is contraindicated. These special planting situations include seasonal wildflower displays and other direct seeded applications (such as hydro-seeding).

G241, G242, G243, G244, G245 These responses were not revised.

G246 Summary of Comment 20: One commenter stated that “[A]ll jurisdictional agencies have requirements for landscape project submittal inclusions or specifications. It is unnecessary for the water efficient landscape ordinance to confuse existing agency requirements.” The commenter stated that none of this information will save water and that “[O]btaining this information for existing and smaller projects may be next to impossible as well as very costly and time consuming.” The commenter recommended striking this and that “Jurisdictional agency requirements shall govern”.

DWR Response: Accept and reject parts. The design criteria and plan specifications are part of the existing regulation (California Code of Regulations, Title 23 Section 492). Modifications were made to simplify and clarify the specifications or requirements for landscape design plans, irrigation design plans and grading design plans. A local agency may adopt the Model or adopt its own as long as it is at least as effective as the Model Ordinance as determined by the local agency.

G247, G248, G249, G250, G251, G252, G253, G254, G255, G256, G257, G258, G259 These responses were not revised.

Section 492.7 Irrigation Design Plan

G260 Summary of Comment 73: A landscape architect commented that the irrigation design requirements would double the fees charged by landscape architects.

DWR Response: Reject. The proposed irrigation design requirements have not been significantly increased in the revised Model Ordinance. Nevertheless, irrigation design and installation costs

may increase initially, but it is anticipated that these costs will be recovered over time through decreased water use and decreased maintenance costs.

G261 Summary of Comment 114: Commenter stated: “Some sites may choose not to install an irrigation system. The Model Ordinance should accommodate this choice as hand watering is the most efficient form of irrigating a landscape.”

DWR Response: The Model Ordinance does not require that an irrigation system be installed.

G262, G263 These responses were not revised.

G264 Summary of Comment 38: Commenter requested that “dedicated landscape water meters should also be required on single family residences with landscaped area greater than 5,000 square feet.”

DWR Response: Reject. The statute exempts dedicated landscape meters on single-family residential connections (Statutes of 2006, Chapter 559, Article 4.5 Irrigated Landscape, Section 535 (b) (1)).

G265 Summary of Comment 114: Commenter stated that “each water meter should have an assigned MAWA to facilitate monitoring of water use by the local agency and/or water purveyor. The ordinance should also require one water meter per irrigation controller. Matching the meter to the controller to the MAWA will also help to facilitate irrigation system surveys, audits, and water use monitoring by the site managers. Every effort should be made to avoid designing a looped irrigation system, a single irrigation system served by two water meters. If a looped system cannot be avoided due to unique site conditions, it should be clearly identified on the irrigation system design plan and throughout the documentation package.”

DWR Response: Reject. Requiring one meter per controller would be onerous and costly for most installations and would create too many meters for water utilities to read. All landscapes (except single -family residential) with irrigated landscape areas greater or equal to 5000 sq. ft. are required to have a separate landscape meter. The irrigation design plan should indicate the points of connection if there exist more than one meter on a site. The MAWA is calculated based on the landscape area served by any one meter. However, meter sizes can vary and a site may have only one large meter but more than one irrigation controllers.

G266, G267, G268, G269, G270, G271, G272, G273, G274 These responses were not revised.

G275 Summary of Comment 44, 74: Commenters stated that only licensed landscape architect should determine the hydrozones for the planting plan.

DWR Response: Reject. Title 16 of the California Code of Regulations, Section 832.7 and Food and Agriculture Code Section 6721 permit other licensed trades and property owners to design landscapes.

G276, G277, G278, G279, G280, G281, G282 These responses were not revised.

Section 492.8 Grading Design Plan

G283 Summary of Comment 14: Commenter stated that the Model Ordinance makes no mention of reducing grading; that the less area disturbed, the less irrigation is required. Commenter suggested encouraging less grading and displacement of natural vegetation.

DWR Response: Reject in part, accept in part. Regulating the amount of grading to be conducted is beyond the scope of the Model Ordinance. The Ordinance addresses projects that install irrigated landscaping and does not regulate modification of non-developed areas and their associated natural vegetation. Regulation of development is the authority of local agencies. However, DWR does highly recommend to “avoid disruption of natural drainage patterns and undisturbed soil” in Section 492.8 (a)(2)(B).

G284, G285 These responses were not revised.

G286 Summary of Comment 100: Commenter stated that the Model Ordinance should clearly state that the project must comply with the new stormwater permit regulations and use Low Impact Development methods to capture as much stormwater as possible and practical for the site to either infiltrate or retain for future irrigation.

DWR Response: Accept in part. The Department encourages the use of stormwater best management practices as required by the statute (Statute of 2006, Chapter 559, Section 65596 (d)) in a separate provision, Section 492.15. It states that applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater ordinances and stormwater management plans. It is not necessary for the Model Ordinance to require compliance with regulations that are the authority of other agencies.

G287 Summary of Comments 14, 20, 58, 59, 100: Multiple commenters stated that the name of the grading plan is easily confused with another plan that is already required elsewhere; that generally a “grading plan” must be prepared by a licensed civil engineer and that this type of plan does not really perform the same function as a “site grading plan” so should not be called the same thing. Commenters recommended changing the name to “landscape grading plan.”

DWR Response: Accept in part. The grading design plan provisions were modified significantly and renumbered as Section 492.8. Section 492.8 (a) (1) now requires a “landscape grading plan.” The Model Ordinance has been revised in order to distinguish between projects with existing grading plans prepared by an engineer and landscape grading plans for projects not already required to submit engineered grading plans to a local agency. The revised Ordinance allows either of these two options in order to fulfill the requirements of this section. The applicant may submit either an approved grading plan as required by the local agency, or a landscape grading plan that shall indicate finished configurations and elevations of the landscape area. The grading plans may be prepared by any legally authorized person.

G288 Summary of Comments 20, 58, 59, 85, 100: Multiple commenters stated that it is inappropriate and confusing to include grading design and specification criteria in a Model Ordinance; that the grading design plans are legislated by public works or engineering ordinances and codes; and that grading design plans require separate permitting. Commenters suggested striking the grading design plan provisions and specifications. Change language to “...[a] grading

design plan meeting the following design criteria and specifications shall be submitted as part of the Landscape Documentation Package, if the grading design plan is different from the grading plan previously submitted by the civil engineer." Require submittal of the approved grading plans.

DWR Response: Accept in part. The grading design section (Section 492.8) has been significantly modified. Section 492.8 (a) (1) now requires a "landscape grading plan." This requirement may be met by submitting either the grading plan previously prepared by a licensed civil engineer, or a landscape grading plan, as specified in the Ordinance. Submission of a grading plan or landscape grading plan shall remain in the Ordinance. Any grading or manipulation of the soil will affect plant growth, water retention, water infiltration and the amount and severity of runoff and erosion. For these reasons a grading plan or a landscape grading plan is required and inclusion of grading design in the Model Ordinance meets the requirements stipulated in the statutes. *Section 65596 (f) Include provisions for onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and to prevent excessive erosion and runoff...* "

G289 Summary of Comment 55: Commenter stated that requiring submittal of a grading design plan with the landscape design package makes no sense since grading is usually completed much earlier in the process than landscape plans.

DWR Response: Reject. The Landscape Documentation Package must present a comprehensive overview of the intended project to the local agency. The local agency will need to ensure that the landscape plan is consistent with the grading plan. Grading may be completed before the landscape documentation package is submitted to the local agency but the grading plan document must be submitted with the Landscape Documentation Package.

G290 Summary of Comment 42: Commenter stated that it is unreasonable to include restrictions concerning the scope and substance of grading design plans within the Model Ordinance, such as to "avoid disturbing natural drainage patterns."

DWR Response: Accept in part. The grading design plan provisions have been modified and the provision regarding "avoid disturbing natural drainage patterns" has been changed to a recommendation. DWR does not believe restrictions on grading are unreasonable so long as they are effective in preventing water waste and do not create an undue burden.

G291 This response was not revised.

G292 Summary of Comments 42, 56: Commenter stated that grading plans in California are prepared primarily by civil engineers, not landscape architects and other landscape professionals; that it is unreasonable to require grading plans with landscape documentation package submittals. Commenters recommended deleting this section.

DWR Response: Accept and reject in parts. The grading design plan provisions were modified significantly and renumbered as Section 492.8 (a) (1) (2) and (3). Many local agencies have requirements for grading permits and these are generally required to be designed by a civil engineer. Such a grading design plan fulfills the requirement of the Model Ordinance. However, if the local agency does not have such a requirement for the project, the Model Ordinance specifies a "landscape grading plan" that the applicant must submit. The landscape grading plan may be designed by any person authorized by California law to design a grading plan. The local agency will need to ensure that the landscape plan is consistent with the grading plan.

G293 Summary of Comments 55, 58, 85, 100: Commenter stated that grading plans are not done on projects that don't require a grading permit; that small sites or renovation of existing landscapes projects are often completed without grading plans; that grading design plans are not generally done for residential projects; and that 2,500 sq ft landscapes often don't require a grading plan.

DWR Response: Reject. Many local agencies have requirements for grading permits and these are generally required to be designed by a civil engineer. Such a grading design plan fulfills the requirement of the Model Ordinance. However, if the local agency does not have such a requirement for the project, the Model Ordinance specifies a "landscape grading plan" that the applicant must submit. The landscape grading plan may be designed by any person authorized by California law to design a grading plan. The local agency will need to ensure that the landscape plan is consistent with the grading plan.

Inclusion of grading design in the Model Ordinance meets the requirements stipulated in the statutes. *Section 65596 (f) Include provisions for onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and to prevent excessive erosion and runoff...*

Landscapes under 2500 square feet are exempt from the Ordinance.

G294 This response was not revised.

G295 Summary of Comment 85: Commenter stated that locating utilities on the Grading Design plan will not be possible; and that grading design plans do not generally include the location of utility lines because only points of connection of utilities are known and what is underground is unknown. Commenter recommended deleting this requirement. Location of all utilities and that the grading plan should simply state that the installing contractor call Underground Service Alert.

DWR Response: Accept. The grading design plan provisions were modified significantly and renumbered as Section 492.8. The requirement to include the location of utilities on the Grading Design Plan has been removed.

G296 Summary of Comment 85: Commenter stated that identifying topography with proposed contour lines and elevations are overkill and not customary for design-build or owner-designed residential projects smaller than 20,000 square feet; that this is more appropriate for a larger project; that a proper survey with plans by an engineer would add more than \$1000 to the cost of a 2,500 square foot project.

DWR Response: Accept in parts. The requirements for delineating finished configurations and elevations, height of graded slopes, drainage patterns, pad elevations and finish grade are part of the existing regulation in effect since 1992 (California Code of Regulations, Title 23 Section 490-495). The January 2008 version of the proposed Ordinance included additional requirements, such as topography with contour lines and cross-sections of cuts and fills. These additional requirements have been deleted from the Ordinance.

G297 Summary of Comment 20, 74: Commenters stated that it is not appropriate for there to be a signature box of this type on a civil engineers sheet and recommended deleting this requirement from the Model Ordinance and require an "efficient use of water" statement to be signed. Another commenter recommended striking the requirement that each sheet of the grading design plan be

signed by civil engineer, landscape architect or licensed landscape contractor; that all licensed landscape architects are required to sign each sheet of project documentation acknowledging their compliance with all regulations applicable to the subject project; and that requiring separate acknowledgement of compliance with this Model Ordinance is unnecessary and redundant.

DWR Response: Accept. The grading design plan provisions were modified significantly and renumbered as Section 492.8. Section 492.8 (a) includes the following language, “*A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.*” Therefore, the method customarily used by a civil engineer for this purpose is acceptable. The requirement for a signature on each page of the grading design plan has been modified so that it is now only required one time.

Section 492.9 Certificate of Completion

G298 Summary of Comment 123,124: Commenter points out there are typically discrepancies between the landscape irrigation design on paper and the actual in-ground installation of the system. While the proposed Model Ordinance requires the responsible landscape contractor and landscape architect to certify compliance, this is sometimes done without an on-site inspection of the installed landscape.

DWR Response: Accept in part. The person signing the certification attests that the project was installed as designed. The Ordinance has been modified to include the following language in 492.9 (a)(2) (A) *where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification;* An on-site inspection by the person signing the certification, while not required, would ensure the integrity of this certification.

G299, G300, G301 These responses were not revised.

G302 Summary of Comments 58, 85: Commenter stated that a local agency should not have to conduct a final field inspection of the project (Section 492.2 (2) (b)) because it should be self-certified by the landscape architect of record. Commenter asked “under what authority does a Certified Irrigation Auditor have to observe an irrigation system (Section 492.2 (2) (a))?” Commenter asserted that certified irrigation auditors “do not have the training or capabilities to observe or inspect irrigation systems and should be removed from this section.” Also, commenter stated that requiring every project to conduct an irrigation audit is unnecessary (Section 492.2 (2) (c)) because if the project has been documented and self-certified by the design professional of record then it is in substantial compliance of the plans and specifications. The audit serves no purpose and should be eliminated.” Commenter stated that submitting to the local water purveyor is not necessary (Section 492.2 (2) (f)). Another commenter stated “delete Section 492.2 (2) (a). It is not a common practice to inspect the irrigation system prior to backfilling. Doing so would be very impractical and would slow down the project considerably. Lateral lines typically are buried as they are complete. This allows the work to progress in all areas. If there are lateral leaks below the surface, they will become manifest during the final field observation after project installation. Flow sensors also would pick up future mainline leaks and breaks in the lateral lines. Mainline inspection is the only inspection that is typically done before backfilling. The requirement in

Section 492.2 (2) (a) to hire a landscape professional to conduct a final field observation would be prohibitively expensive for homeowners who are installing their landscape themselves.”

DWR Response: Accept in part. The requirement for the local agency to conduct a final field inspection has been deleted from the Ordinance. Certification for Irrigation Auditor is not, in itself, adequate to certify that the irrigation system has been installed according to the design plan. Allowable signatures certifying compliant installation of the project have been modified and now state, “...signer of the landscape design plan, signer of the irrigation design plan, or licensed landscape contractor...” An Irrigation Auditor is not approved to sign either the landscape or irrigation design plan, as stated in sections 492.6 (b) (13) and 492.7(b) (7). The Certificate of Completion may be useful to the water purveyor for managing the water account at the property. The requirement for an inspection prior to backfilling has been removed from the Ordinance. The final field observation requirement has been removed. However, the certificate of completion requires certification that the landscape is installed as per the design plans. An on-site inspection by the person signing the certification, while not required, would ensure the integrity of this certification.

492.9 (a) (2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

Allowable signatures for this certification have been modified and now state, “...signer of the landscape design plan, signer of the irrigation design plan, or licensed landscape contractor...” According to the Business and Profession Code and California Code of Regulations, private homeowners may design the landscape for their own property. This allows private homeowners to sign the landscape design plan and the certificate of completion for their own project.

G303 Summary of Comment 112: The project landscape architect should have final sign off for the irrigation system, not the irrigation contractor. No installer should have the duty of inspecting and certifying their own work. However, new construction as-built verification should be included, as a guarantee of as- built matching approved design.

DWR Response: Accept in part and reject in part. Allowable signatures for this certification have been modified and now state, “...signer of the landscape design plan, signer of the irrigation design plan, or licensed landscape contractor...” The installer is not authorized to sign this document, unless they are also the irrigation designer, landscape designer or landscape contractor. The person signing the certification attests that the project was installed as designed. In order for this to be an honest and accurate certification, any deviations from the approved design, “as-builts”, shall be included as stated in 492.9 (a) (2) (A)” *where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification.*

G304 Summary of Comment 59: Commenter stated that final sign-off of the project installation should be consistent with what is allowed by landscape architects and licensed contractors in the Business and Professions Code.

DWR Response: Accept. Allowable signatures for this certification have been modified and now state, “...signer of the landscape design plan, signer of the irrigation design plan, or licensed landscape contractor...” The signer of the design plans must be authorized by the Business and

Professions Code, the California Code of Regulations or the California Food and Agriculture Code, as stated in the modified text of the Ordinance.

G305 Summary of Comments 67, 140: The project applicant is required to have a licensed landscape architect or licensed landscape contractor conduct a final field observation. Thus seems not only redundant but puts a financial burden on both the project applicant.

DWR Response: Accept in part and reject in part. The final field observation requirement has been removed. However, the certificate of completion requires certification that the landscape is installed as per the design plans or the as-built drawings. An on-site inspection by the person signing the certification, while not required, would ensure the integrity of this certification.

492.9 (a) (2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

Allowable signatures for this certificate have been modified and now state, "...signer of the landscape design plan, signer of the irrigation design plan, or licensed landscape contractor..." The signer of the design plans must be authorized by the Business and Professions Code, the California Code of Regulations or the California Food and Agriculture Code, as stated in the modified text of the Ordinance.

G306 Summary of Comments 20, 133, 152: The Model Ordinance would place conditions on the Building Department upon issuance of Certificates of Completion and Occupancy. Landscaping is the last thing to be installed and Certificates of Completion and Occupancy are typically granted before the landscaping has been completed. This is not a typical county, municipality, or district requirement. This could lead to delays in securing final approval for homebuilders.

DWR Response: Accept. Requirements for the local agency to withhold the Certificate of Occupancy until the Certificate of Completion is approved have been removed.

G307 Summary of Comment 20: The ordinance requires delivery of the Certificate of Completion to the local water purveyor. Because of privacy issues, the required local agency Certificate of Completion cannot be shared with the local water purveyor unless authorized by the property owner. In conversations with Irvine Ranch Water District, I was told that because of privacy issues, information gathered about a specific project by one agency can not be shared with another agency or other entity without express consent of the owner or developer of the project. Commenter recommended striking the local retail water purveyor from Section 492.9 (b) (2).

DWR Response: Reject. The comment does not cite legal authority or provide a legal basis as to what legally protected privacy right may be violated when a local agency shares water consumption information with a local water purveyor without the property owner's consent. DWR is unaware of any privacy law that would preclude a local agency from sharing water consumption information with a water purveyor with or without the property owner's consent, other than personal identification information. Local agencies may have their own privacy policies and procedures regarding sharing water consumption information, but because DWR is unaware of those policies, it cannot comment on them.

G308 Summary of Comments 20, 58, 74, 90: It is important for the certificate of completion to be as simple as possible to encourage its proper use. The local agency requirements for reviews,

permits and inspections are a considerable increase in effort which will increase costs to development. This will be challenged by the development community and require additional processes to be developed by local agencies.

DWR Response: Accept. The Certificate of Completion has been modified and renumbered as Section 492.9. The required elements have been simplified and are now clearly listed in a manner similar to the Landscape Documentation Package. Also, the organization of the sample Certificate of Completion in Appendix C has been modified to accurately reflect the text in Section 492.9. This reorganization simplifies the Certificate of Completion. Requirements for the Irrigation Schedule (Section 492.10) and Audit Schedule (Section 492.12) have been eased considerably in response to public comments that they were overly burdensome. Specific changes to Sections 492.10 and 492.12 are found in their respective sections later in this document.

G309 Summary of Comments 20, 58, 74: Multiple commenters objected to the audits, audit reports and schedules in Section 492.2. Commenter stated that “requiring an irrigation audit of a new system prior to final installation certification is unnecessary, very costly and will impact completion schedule. Water audits may be warranted when exceeding water allotments and should not necessarily have a schedule requirement. A water audit schedule submitted with the initial landscape development package is not necessary or regulatory. Strike any requirement for an irrigation audit as a prerequisite to the installation certification and strike all references to a schedule of water audits.” A commenter stated that “an audit should not be required for certification of completion. In addition, an audit report should not be required.” Another commenter stated that [Section 492.2] contained “too much detail. [It is] burdensome for the inspectors and the [project] applicants. Now includes irrigation audits and audit reports. City has the right to charge applicants for water audits. Also requires ongoing audits of 20% of sites of 2,500 square foot. An alternative method of checking water use could be a system such as the system the City currently employs for public landscape areas where by [the] water budget is included at the design stage and the water purveyor notifies the City if the budget is exceeded. The City already uses local weather based control systems.”

DWR Response: Accept in part. The requirements for irrigation audits have been modified and renumbered to Section 492.12. The requirement for an irrigation audit upon project completion remains in the Ordinance to ensure that the irrigation system functions in accordance with the approved design plans. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to “...*administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.*” Also, the Ordinance states in Sections 492 and 493 that, “*A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.*” Though cooperation between the local agency and the water purveyor is encouraged, the Ordinance does not specify the parameters or extent of the cooperation. There are far too many variables statewide to incorporate specifications, such as the commenter suggests, into a statewide Model Ordinance. Local agencies may include these specifications in their local ordinances.

G310 Summary of Comment 59: Commenter stated that the number of site visits required by the Certificate of Completion is onerous. This will result in increased fees and expenses for local

agencies that conduct the reviews. These costs should be addressed in the Statement of Reasons for the ordinance.

DWR Response: Accept. Explicit requirements for site visits/inspections for the Certificate of Completions have been deleted from the Ordinance because agencies would be deprived of discretion and the requirements could be too burdensome. But it is expected that sufficient site visits will be conducted; they are necessary in order to accurately complete the certificate.

G311 Summary of Comment 85: Commenter requested that the wording of Certificate of Completion should be modified to take into account ‘as-builts’, which become the overriding plans for the project.

DWR Response: Accept. The following language has been added to this section to clarify this issue: *492.9 (a)(2)(A) Where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification.*

Section 492.10 Irrigation Scheduling

G312 This response was not revised.

G313 Summary of Comments 20, 58, 59, 67, 76, 85, 100, 108: Multiple commenters stated that there was no need to develop irrigation schedules when smart controllers were required.

DWR Response: Accept. The requirement to provide irrigation schedules has been removed from the regulation. Instead, applicants must submit the parameters for setting “smart controllers”.

G314 Summary of Comments 42, 56: Several commenters stated that irrigation scheduling language from first ordinance should be retained and that the additional language is of little value.

DWR Response: Reject. The department believes that the additional language provides guidance to what factors should be considered in setting up an irrigation schedule and the level of detail in the schedule.

G315 Summary of Comment 44: A commenter stated that the irrigation schedule should be developed by landscape maintenance as they will know best about the particular situation at the site.

DWR Response: Reject. The requirement to submit irrigation schedules has been dropped from the Certificate of Completion. Instead, applicants must submit the parameters for setting the automatic controller. These parameters may be refined by the maintenance contractor if necessary.

G316 Summary of Comment 44: A commenter stated that a water window needs to be developed for drip and micro-sprays.

DWR Response: Reject. Water windows were established to reduce daytime evaporation from spray irrigation. Water loss to evaporation is minimal with drip and microsprays so a water window is not necessary.

G317 This response was not revised.

G318 Summary of Comment 85: One commenter stated that the water window in the Model Ordinance may not work for the turf and plant establishment time periods.

DWR Response: Reject. This is a consideration for local agencies and water purveyors based on local conditions. Frequent irrigation events (for example, several start times per day) to establish sod or germinate seed is a common practice and of short duration. The local agency may acknowledge this by giving a short term variance or extend the watering window for this purpose.

Section 492.11 Landscape and Irrigation Maintenance Schedule

G319 Summary of Comments 78, 114, 173: Several commenters stated maintenance requirements would accomplish very little to ensure that landscapes will actually be irrigated under the Maximum Applied Water Allowance.

DWR Response: Reject. Maintenance schedules specify practices that keep the landscape healthy, and the irrigation system functioning as designed, so that the landscape is able to be irrigated within MAWA and remain attractive. Compliance with MAWA is addressed in section 492.12 (b)(2) “*the local agency shall administer programs ...for compliance with the MAWA.*”

G320 Summary of Comments 78, 114, 121, 166, 171: Multiple commenters stated that only landscape water managers, who are not included within this ordinance, can control the landscape maintenance requirements; that the Model Ordinance does not provide enough accountability for the person maintaining the landscape; that the requirements for landscape maintenance contractors, such as CLCA and IA water management certifications, should be incorporated into the Model Ordinance.

DWR Response: Reject. The property owner has both the responsibility and the authority to hire qualified personnel to maintain the landscape within the MAWA. Any accountability on the part of the landscape water managers and maintenance contractors is owed to the property owner. The property owner also has the responsibility of providing the maintenance personnel with the planning documents that serve as guides to irrigating within MAWA. Compliance with MAWA is addressed in section 492.12 (b)(2) “*the local agency shall administer programs ...for compliance with the MAWA.*”

G321 Summary of Comments 20, 78, 98, 114: Multiple commenters stated that the Model Ordinance does not address the ongoing maintenance of the landscape, repair of the irrigation system and regular irrigation scheduling adjustments; that maintenance requirements are dynamic; that maintenance guidelines are never prepared with the construction documents and are not part of a permitted package and that governing agencies do not review or inspect non-permitted work. Commenters recommended striking this section reasoning that water district/agency requirements shall govern.

DWR Response: Reject. The Ordinance addresses ongoing management by way of requiring maintenance schedules. These schedules are to be provided to the property owner, who may then

provide them to the maintenance personnel as guides for ongoing management, so that the landscape and irrigation are maintained to operate as designed. Providing the schedules to the maintenance personnel is a critical link in having the landscapes operate as designed. Compliance with MAWA is addressed in section 492.12 (b)(2) “*the local agency shall administer programs ...for compliance with the MAWA.*”

G322 Summary of Comments 114: A commenter stated that AB 1881 Section 65596 (l) listed provisions for landscape maintenance that "may" include, but are not limited to, performing routine irrigation system repair and adjustment, conducting water audits, and prescribing the amount of water applied per landscaped acre. Commenter suggested that these items be listed as items that could be voluntarily implemented by a local agency or water purveyor.

DWR Response: Reject. The text of AB 1881, Section 65596 states:

“The updated Model Ordinance adopted pursuant to Section 65595 shall do all of the following in order to reduce water use:

(l) Include provisions for landscape maintenance practices that foster long-term landscape water conservation. Landscape maintenance practices may include, but are not limited to, performing routine irrigation system repair and adjustments, conducting water audits, and prescribing the amount of water applied per landscaped acre.”

This language requires DWR to include provisions for landscape maintenance, which it has done. The statement, “Landscape maintenance practices may include...” does not indicate that the selected practices are voluntary; rather, it indicates a list of examples of practices that DWR may include in the required provisions. Additional practices include but are not limited to, replenishing mulch, weeding, pruning and aeration of turf areas. All of these can contribute to the health and water efficiency of the landscape. It is the responsibility of the property owner to ensure that the landscape maintenance practices listed in the maintenance plan are carried out. Local agencies are responsible for adopting and enforcing their local ordinances. Local agencies may modify requirements in the Maintenance Schedule if they are adopting a local ordinance different from the Model Ordinance. However, the local ordinance must be at least as effective as the Model Ordinance.

G323, G324 These responses were not revised.

Audits - overall comments

G325 Summary of Comments 14, 20, 59, 62, 65, 76, 78, 87, 91, 95, 102, 112, 114, 120, 164ot, 173: Multiple commenters recommend water meters and billing with tiered rate structures and/or waste water enforcement in place of monitoring existing water consumption.

DWR Response: Reject. Significant modifications were made to the irrigation audit sections and renumbered as Section 492.12 (new and rehabilitated landscapes) and Section 493.1 (existing landscapes). DWR can only encourage the use of tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). DWR does not

have authority under Statute of 2006 Chapter 559 (AB1881) to require water purveyors to implement a tiered rate structure.

G326 This response was not revised.

G327 Summary of Comment 20: Commenter stated that audits cannot create irrigation schedules using real time ET data.

DWR Response: Accept. The Model Ordinance does not require that audits create irrigation schedules using real time ET data. Irrigation schedules shall be determined by the automatic irrigation controller using either ET data or soil moisture sensor data. Audits evaluate the irrigation system for proper system operation and efficiency.

G328 This response was not revised.

G329 Summary of Comments 14, 58, 59, 83, 85, 91, 99, 107, 154: Multiple commenters stated that irrigation audits are not an effective means of saving water; that audits themselves will do very little in identifying the corrective actions necessary to alleviate over watering; that audit serves no purpose and should be eliminated; that the merits of audits compared to other performance motivators, such as escalating block rate structures, or water budget feedback loops, warrants further investigation.

DWR Response: Reject. Irrigation audits, for new and rehabilitated landscapes and existing landscapes, are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9)). Significant modifications were made to the irrigation audit sections to ease the requirements and were renumbered as Section 492.12 (new and rehabilitated landscapes) and Section 493.1 (existing landscapes). DWR can only encourage the use of escalating block rate structures, also known as tiered rates (see Section 490 (b) (6)) because tiered rates are regulated by the California Public Utilities Commission (CPUC). DWR does not have authority under statute (Statute of 2006 Chapter 559) (AB1881) to require water purveyors to implement a tiered rate structure. Audits evaluate the irrigation system for proper system operation and efficiency. One of the outcomes of an irrigation audit is to provide recommendations (corrective actions) to improve irrigation efficiency. Irrigation audits are an accepted industry practice to evaluate the efficiency or distribution uniformity of irrigation systems. The Irrigation Association, the Center for Irrigation Technology at CSU Fresno, and the Irrigation Training and Research Center at Cal Poly San Luis Obispo all recognize these procedures and provide training and certification in irrigation audits.

G330 Summary of Comments 20, 25, 83: Multiple commenters stated that irrigation audits are not reliable; that the results cannot be duplicated nor are they verifiable; that this method of auditing produces low irrigation distribution uniformity and does not give a true picture of the irrigation efficiency. Commenters suggested deleting water audits.

DWR Response: Reject. Irrigation audits, for new and rehabilitated landscapes and existing landscapes, are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9)). Significant modifications were made to the irrigation audit sections and renumbered as Section 492.12 (new and rehabilitated landscapes) and Section 493.1 (existing landscapes). Irrigation audits are an accepted industry practice to evaluate the efficiency or distribution uniformity of irrigation systems. The Irrigation Association, the Center for Irrigation Technology

at CSU Fresno, and the Irrigation Training and Research Center at Cal Poly San Luis Obispo all recognize these procedures and provide training and certification in irrigation audits.

G331 Summary of Comment 82: The ordinance requires that we track all accounts, including single family homes that have rehabilitated their landscape under the criteria listed [in the Applicability section]. This will have a limited benefit, will require a significant amount of staff time to keep updated, and therefore, is not practicable. This might be more appropriate for accounts with dedicated irrigation meters.

DWR Response: Accept in part. Requirements to track water use have been deleted from the Ordinance. The Ordinance has been modified to allow greater flexibility to the local agency. The new language is, *“the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.”*

G332, G333, G334, G335, G336 These responses were not revised.

G337 Summary of Comments 58, 62, 85, 87, 122: Multiple commenters stated that a full audit requirement for the single family homeowner is an expensive and an onerous mandate; that audits should be offered as a tool to these customers instead. Commenters suggested providing an exception for single family residential users.

DWR Response: Accept and reject in parts. Significant modifications were made to the irrigation audit sections and renumbered as Section 492.12 (new and rehabilitated landscapes) and Section 493.1 (existing landscapes). Ongoing, mandatory audits of existing landscapes have been deleted from the Ordinance and requirements for homeowner provided landscape projects have been relaxed. Revised section 492.12 (b) (2) states, *“The local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.”* Rehabilitated homeowner provided landscapes are no longer subject to the provisions of Sections 492 through 492.17. The square footage threshold for new construction homeowner provided landscapes has increased from 2,500 square feet to 5,000 square feet. The requirement for an irrigation audit upon project completion of a new landscape that meets the requirements in section 490.1 remain in the Ordinance to ensure that the project operates as designed.

G338 Summary of Comments 110, 102, 168: Multiple commenters stated that there are no remedies for non-compliance with audit recommendations; that if a property owner wants to improve an already developed property, it is unclear what threshold would have to be met to trigger reconstruction of a non-compliant landscape.

DWR Response: Reject. Significant modifications were made to the irrigation audit sections and renumbered as Section 492.12 (new and rehabilitated landscapes) and Section 493.1 (existing landscapes). It is beyond the scope of the Ordinance and the authority of DWR to specify what penalties the local agency shall administer. Although the Model Ordinance does not require an applicant to implement audit recommendations, these recommendations will be available to improve system efficiency should the local agency programs determine that the landscape is exceeding MAWA. Revised Section 492.2 states, *“A local agency may administer penalties, or designate authority to the local water purveyor to administer penalties, to the project applicant for non-compliance with the Ordinance”*. The Model Ordinance does not require the reconstruction of

an existing landscape. If a landscape is undergoing rehabilitation, the new landscape must meet the requirements of the Ordinance. Beyond the provisions of the Model Ordinance, this is a Local Agency matter.

G339 This response was not revised.

G340 Summary of Comment 54, 123: Several commenters stated that there is no requirement to implement audit recommendations; that an audit alone is not sufficient; that many property owners will not voluntarily change their water intensive landscapes. Commenters suggested requiring property owners to implement water management and maintenance recommendations from the landscape irrigation audit report.

DWR Response: Reject. Although the Model Ordinance does not require an applicant to implement audit recommendations, these recommendations will be available to improve system efficiency should the local agency programs determine that the landscape is exceeding MAWA. Revised section 492.12 (b) (2) states, *“The local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.”*

Section 492.12 Irrigation Audit, Survey and Water Use Analysis for New Construction or Rehabilitated Landscapes

G341, G342 These responses were not revised.

G343 Summary of Comments 20, 45, 67, 85, 102, 151, 158: Commenters requested providing an exemption from audits if the landscape project stays within its MAWA, as determined in the Water Efficient Landscape Worksheet section C.

DWR Response: Reject. Significant modifications were made to the irrigation audit sections and renumbered as Section 492.12 (new and rehabilitated landscapes). The audit required at project completion shall remain in place. This audit is to determine whether or not the project functions as designed in the Landscape Documentation Package (LDP). The LDP includes the landscape and irrigation design plans and the Water Efficient Landscape Worksheet. The project may be designed to operate within MAWA, but an audit will evaluate the function of that design after installation. Ongoing, mandatory audits of existing landscapes have been deleted from the Ordinance. Revised section 492.12 (b) (2) states, *“...the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.”*

G344 Summary of Comments 55, 58, 59, 62, 164: Commenters stated that the Initial Statement of Reasons failed to consider the expense of audits and surveys.

DWR Response: Accept in part. Recognizing these concerns, the updated Ordinance attempts to streamline procedures and reduce costs to the extent possible. Costs are addressed in the Initial Statement of Reasons, and are later addressed in the Final Statement of Reasons, Economic and Fiscal Impact Statement Form 399, and Supplement Report to the Department of Finance.

Additionally, significant modifications were made to the irrigation audit sections. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to “...administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.”

G345 Summary of Comments 55, 123, 167: Multiple commenters stated that recovering cost for audits and surveys may not be realistic; it is unreasonable to expect recovery of costs for an audit from a property owner that did not request the audit; that raising fees in an amount sufficient to cover this cost would not be palatable to the public. Commenter stated that “since Proposition 218, assessing fees to property owners has become more difficult and cumbersome for public agencies. Some local agencies may not be able to provide "for payment" services based on their city charter.” Commenters recommended remove landscape auditing and surveying requirements.

DWR Response: Accept in part. Recognizing these concerns, the updated Ordinance attempts to streamline procedures and reduce costs to the extent possible. Costs are addressed in the Initial Statement of Reasons, and are later addressed in the Final Statement of Reasons, Economic and Fiscal Impact Statement Form 399, and Supplement Report to the Department of Finance. Additionally, significant modifications were made to the irrigation audit sections. Local agencies are no longer required to conduct ongoing, mandatory audits of existing landscapes, but are now required to “...administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.” Also, the Ordinance states in Sections 492 and 493 that, “A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.”

G346 Summary of Comment 59: Commenter stated that some local agencies may not be able to provide for-payment-services based on their city charter.

DWR Response: Accept in part. Recognizing these concerns, the updated Ordinance attempts to streamline procedures and reduce costs to the extent possible. Costs are addressed in the Initial Statement of Reasons, and are later addressed in the Final Statement of Reasons, Economic and Fiscal Impact Statement Form 399, and Supplement Report to the Department of Finance. Significant modifications were made to the irrigation audit sections. Local agencies are no longer required to require mandatory audits of existing landscapes, but are now required to “...administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.” Also, the Ordinance states in Sections 492 and 493 that, “A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.”

G347 Summary of Comments 20, 68, 73, 84, 88: Commenters state that there are not enough water auditors in California to carry out the number of audits required in the Model Ordinance and recommended striking the need for mandatory water audits.

DWR Response: Accept in Part. Significant modifications were made to the irrigation audit sections. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to “...administer programs that may include, but not be limited to, irrigation

water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.” The remaining audits, required at project completion, can be carried out by the existing water auditors in the state and may create new auditor jobs.

G348 Summary of Comment 74: Commenters stated that the irrigation audit requirements are redundant in some areas; that many water agencies already offer both residential and large landscape audits; that it does not make sense to duplicate the process.

DWR Response: Reject. Significant modifications were made to the irrigation audit sections. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to “...*administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.*” Auditing and water use monitoring programs that are already in place may serve to meet the requirements of the Ordinance. The requirement for project applicants to conduct an audit upon project completion is not duplicated in other statewide regulations or agreements.

G349 Summary of Comments 58, 59, 62, 82, 102, 111: Commenters stated that audits and surveys should be the responsibility of water purveyors, not local agencies; that the Model Ordinance includes a requirement to compare water use against the MAWA; that this makes the requirements dependent on local water agencies. Prepare separate enforcement legislation directed to water purveyors. Direct these requirements to the water purveyor.

DWR Response: Accept in Part. The statute (Statute of 2006 Chapter 559) (AB1881) authorized DWR to direct the regulation to cities and counties, not to water agencies. In order to address the commenter’s concern, the following language has been included in the Ordinance sections 492 and 493, “*A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.*”

G350 Summary of comment 87: Commenter stated that the twenty percent rule for mandatory audits seems arbitrary.

DWR Response: Accept. The provisions for ongoing, mandatory audits of existing landscapes have been removed from the Ordinance.

G351 Summary of Comments 16, 18, 20, 33, 45, 50, 55, 58, 59, 62, 68, 73, 76, 77, 78, 81, 84, 87, 88, 91, 98, 102, 110, 111, 115, 123, 140, 152, 164, 167, 168: Multiple commenters stated that the requirements for audits and surveys will create a significant cost to local agencies and water districts; that these requirements would place an untold burden on local agencies; that the logistics would be staggering; that many local agencies lack the resources to implement such on-going audits and to compile and analyze the resulting data.

DWR Response: Accept in part. Irrigation audits for new and rehabilitated landscapes are part of the existing regulation. However, significant modifications were made to the irrigation audit sections. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to “...*administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.*”

G352 Summary of Comments 44, 87: Commenters stated that requiring landscapes over 2,500 sq. ft. to be audited is too small a landscape area; that landscapes between 2,500 sq. ft. and 5,000

sq. ft. are not required to have dedicated meters making audits a challenge. Commenters recommended changing the requirement to landscapes over 5,000 square feet.

DWR Response: Accept in part. Local agencies are no longer required to conduct ongoing, mandatory audits of existing landscapes, but are now required to “...*administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.*” Audits conducted at project completion remain in the Ordinance in order to verify that the project is functioning as designed. The square footage threshold for homeowner provided landscapes has been raised from 2500 to 5000 square feet. The 2500 square foot threshold remains in place for other properties in order not to diminish the potential for water conservation.

G353 Summary of Comments 55, 58, 59, 62, 77, 88, 100, 151, 164: Commenters stated that requiring routine or mandatory audits is excessive; recommended developing “criteria to trigger an audit, such as, requiring an audit for a third offense only, or only for those sites where there has been a violation of a water waste ordinance, or only if the property exceeds the stormwater provision, or only for the worst 20%.”

DWR Response: Accept. Local agencies are no longer required to conduct ongoing, mandatory audits of existing landscapes, but are now required to “...*administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.*”

G354 Summary of Comments 16, 50, 55, 59, 82, 84, 87, 90, 167, 168: Commenters stated that it is unlikely that residents would grant permission to enter their property for a landscape irrigation audit that they will be required to pay for. Commenters asked “What do you think that the chances will be that they will give us permission if they know that it will result in a charge? Or does this propose that we shut off their water to meet the State mandate?” Commenters recommended that the audit requirement should be removed and replaced with a more stringent water waste prohibition requirement.

DWR Response: Accept. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to “...*administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.*” In cases where it may be necessary to gain access to a property for purposes of conducting an irrigation audit or survey, the local agency would be responsible for developing procedures for gaining access.

G355 This response was not revised.

G356 Summary of Comment 14, 62, 111, 152: Multiple commenters stated that audit requirements place the expense of the audit on the customer; that property owners should not have to pay for audit if no violation is found; that there needs to be a reimbursement to the property owner if the agency requires an extra audit and does not find a violation.

DWR Response: Accept in part. Recognizing these concerns, the updated Ordinance attempts to streamline procedures and reduce costs to the extent possible. Costs are addressed in the Initial Statement of Reasons, and later in the Final Statement of Reasons, Economic and Fiscal Impact Statement Form 399, and Supplement Report to the Department of Finance. The modified text of the Ordinance has been modified such that the applicant is only required to conduct an audit at

project completion. This audit ensures that the system will perform as designed and shall remain in the Ordinance as the responsibility of the applicant. Other mandatory audit requirements for new and existing landscapes have been removed from the Ordinance, however, local agencies are now required to “...administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the MAWA.”

G357 Summary of Comment 99: Commenter stated that an irrigation audit is appropriate for some landscapes, but a post installation review is adequate for others. Commenter suggested requiring a post-inspection review or survey for all other landscape project installations.

DWR Response: Reject. Irrigation audits for new and rehabilitated landscapes are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9). Certified irrigation auditors have been trained to conduct audits according to certain protocol. There is no known or common standard protocol for “post-installation review”.

G358 This response was not revised.

Section 492.13 Irrigation Efficiency

G359 Summary of Comments 20, 90: A commenter stated that there were no studies completed to document the change in irrigation efficiency from 0.625 to 0.71. Another commenter stated that with the current efficiency of 0.625 being hard to meet, an efficiency of 0.71 is not achievable.

DWR Response: Reject. The Evapotranspiration Adjustment Factor White Paper, which was published by the Department of Water Resources and included in the rulemaking record, lists a number of papers and studies to justify the required improvement in efficiency.

G360 This response was not revised.

G361 Summary of Comment 58: A commenter asked if MAWA is achieved, does the landscape still have to meet the irrigation efficiency standard.

DWR Response: Yes. The irrigation efficiency standard must be met when designing the irrigation system.

G362 Summary of Comment 74: A commenter stated that 0.71 efficiency is hard to achieve in shrub areas and recommends that 0.625 efficiency be retained for shrubs.

DWR Response: Reject. Since shrubs have large and wide root systems, higher irrigation efficiencies are easier to achieve if using the appropriate irrigation methods. Spray nozzles, that are appropriate for turf, may be obstructed by shrubs, reducing the distribution uniformity as a part of

irrigation efficiency. The Ordinance requires the use of low volume irrigation in such planting situations, as follows;

492.6 Landscape Design Plan

(A) A minimum two inch (2") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers or direct seeding applications where mulch is contraindicated.

492.7 Irrigation Design Plan (a)(1)(M) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

The irrigation efficiency of 0.71 is average irrigation efficiency for the total landscape.

G363 Summary of Comment 112: Commenter stated “we oppose or suggest modification of Section 492.6 and 492.15 pertaining to the levels of irrigation efficiency; Section 492.6 states in [Hydrozone 1] high water use plant the irrigation efficiency is .65 while Section 492.15 states irrigation efficiency is .71.” Commenter requested clarification as both appear to be describing the same target value for cool season turf.”

DWR Response: The irrigation efficiency for the landscape has to average 0.71. The medium and low water use plants will use irrigation systems with higher efficiencies while turf and other high water use plants can have irrigation efficiencies lower than 0.71 as long as the average efficiency over the landscape is equal to or great than 0.71.

Section 492.14 Recycled Water

G364, G365, G366 These responses were not revised.

G367 Summary of Comment 90: Commenter stated that active turf areas cannot comply with the Model Water Efficient Landscape Ordinance; that an exemption should be included in the Model Ordinance for these types of active use athletic fields (organized game and practice sports fields, and multi-use fields); that it the City of Roseville currently has its own ordinance in place requiring recycled water to be used in these types of areas where available.

DWR Response: Accept in part. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B) and shall remain in the modified text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c). The proposed regulation was modified so that landscapes using recycled water are considered Special Landscape Areas (SLA) (but not exempt) where the ETAF shall not exceed 1.0 (see Section 492.4 (b) (4) and Section 491 (ggg) for the definition of SLA).

G368 This response was not revised.

G369 Summary of Comments 59, 74, 83, 89, 104, 122, 149: Commenters stated that it is counterproductive to punish those using recycled water by imposing a water budget. Commenters suggested removing any and all restrictions on the use of recycled water in the model landscape ordinance and exempt recycled water from a MAWA.

DWR Response: Reject. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B) and shall remain in the modified

text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c). The proposed regulation was modified so that landscapes using recycled water are considered Special Landscape Areas (SLA) where the ETAF shall not exceed 1.0 (see Section 492.4 (b) (4) and Section 491 (ggg) for the definition of SLA). The intent is not to punish users of recycled water but to account for its reasonable use as a valuable source of water. Recycled water should be used efficiently. There are no restrictions on the use of recycled water.

G370 This response was not revised.

G371 Summary of Comment 149: Commenters stated that limiting high water plants to recycled irrigation water would encourage more customers to use recycled water, while still allowing officials to plan and build the types of parks that their communities demand. Commenter recommended restricting high water using plant areas, such as large turf grass areas, to irrigation by recycled water only.

DWR Response: Reject. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B) and shall remain in the modified text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c) (d). A provision that requires recycled water irrigation only on portions of landscapes would be very burdensome to enforce and would restrict options for changing plant mixes in the future. Therefore, the Ordinance shall not have separate irrigation system requirements for high water plants and shall regulate the landscape as a whole. Section 492.14 (b) requires the use of recycled water unless exempted by the local agency for all types of plants including high water using shrubs and trees and turf. In the MAWA calculation, the plant factor has not changed therefore the plant mix ratio has not changed and recreational turf has an ETAF of 1.0., cities and counties are still able to install functional parks that will be satisfactory to their residents.

G372, G373 These responses were not revised.

G374 Summary of Comments 44, 85: Commenters recommended deleting Section 492.6 (1) (c) (2) in the Landscape Design Plan related to recycled water; that recycled water normally should not be used as a source of water for water features.

DWR Response: Accept in part. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B) and shall remain in the modified text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c) (d). The proposed regulation was modified to require the use of recycled water for decorative water features only. Tertiary treated recycled water is filtered and disinfected, and is considered safe for casual contact (not drinking).

G375, G376, G377 These responses were not revised.

G378 Summary of Comment 58: Commenter stated that the installation of a dual distribution system is not required; that there be a system installed for recycled water only.

DWR Response: Accept. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B)) and shall remain in the modified text of the proposed regulation but renumbered as Section (a) (b) (c) (d). The language referring to dual distribution systems was deleted. Most irrigation systems are in use on properties that also

receive and use potable water, thereby necessitating a dual distribution system. However, there are projects, such as highway landscapes, where a potable system is not required. The language referring to dual distribution systems has been removed.

G379, G380 These responses were not revised.

G381 Summary of Comment 85: Commenter stated that requiring recycled irrigation systems for residential properties with landscapes of 2,500 square feet or more is not appropriate in an ordinance applying to homeowner provided landscaping. Commenter recommended exempting homeowner provided landscaping from this provision.

DWR Response: Accept in part. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B)) and shall remain in the modified text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c) (d). Section 490.1 (a) (3) was modified to increase the square footage for homeowner provided landscaping as equal to or greater than 5,000 square foot. Homeowners are only able to use recycled water if it is available and in most places, residential neighborhoods do not have recycled water infrastructure to deliver recycled water, so the recycled water provisions would not apply to those residential properties. Further, if the infrastructure is available and the water is available the infrastructure was most likely installed and required as a condition to allow development of the planned community and the residents may be compelled (by the local agency or local water purveyor) to use it for irrigation.

G382 This response was not revised.

G383 Summary of Comments 8, 59, 89, 104: Commenters stated that not allowing a leaching fraction until the irrigation source equals or exceeds 3.0 deciSiemens per meter (dS/m) will jeopardize landscapes using recycled water; that most recycled water purveyors deliver recycled water with a TDS under 2,000 mg/l in order to meet customer needs; that even at this TDS level, landscape managers often adjust their irrigation practices for irrigation water quality and the specific needs of plant materials; that irrigating with no leaching fraction will place landscapes using recycled water at a disadvantage over sites irrigating with potable water. Commenters suggested incorporating the work of the United States Department of Agriculture's Salinity Laboratory in requirements for leaching fraction and consider a more flexible formula for calculating a leaching fraction that includes the plant material salinity threshold as well as the recycled water quality.

DWR Response: Accept in part. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B)) and shall remain in the modified text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c) (d). The provision stating a specific salinity threshold to allow extra water for a leaching fraction was deleted. Landscapes irrigated with recycled water are allowed an ETAF of 1.0. The water allowed in the budget above the standard water budget with an ETAF of 0.7 will act as a leaching fraction.

G384 Summary of Comment 34: Commenter stated that there is no allowance for periodic maintenance leaching cycles; that in many part of California it is necessary to conduct periodic leaching cycles to manage the salinity levels in the soil in a way that reduces the effect of salts on plants.

DWR Response: Accept in part. The recycled water provisions are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (6) (B)) and shall remain in the modified text of the proposed regulation but renumbered as Section 492.14 (a) (b) (c) (d). The provision stating a specific salinity threshold to allow extra water for a leaching fraction was deleted. If leaching is required above that is provided by the higher water budget (ETAF 1.0) and rain, the local agency may allow additional maintenance leaching on a case by case basis.

Section 492.15 Stormwater Management

G385, G386, G387, G388, G389, G390, G391, G392 These responses were not revised.

Section 492.16 Public Education

G393 Summary of Comments 59, 100: Commenters stated “it is not clear in the proposed Model Ordinance if the public education requirement applies only to homeowners of new homes with over 2,500 square feet of landscape area or to all new homeowners.” Commenters suggest this provision should be revised accordingly: “A local agency shall provide public education to all new owners of new, single family residential homes regarding the design, installation, management and maintenance of water efficient landscapes.” Also, commenters stated, “...another provision allowing the local agency to require the developer to provide the mandatory educational materials to the homeowner.”

DWR Response: Reject. The public education provision is part of the existing regulation under California Code of Regulations, Title 23 Section 492 (d). Minor modifications were made to this and renumbered Section 492.16. This provision is an opportunity for local agencies to demonstrate water saving techniques and to showcase water efficient landscapes directly to homeowners whose outdoor landscape water use is generally 30-50% of their total residential water use. Local agencies are free to require developers to distribute educational materials, for example, during the showing or selling of homes, or as a condition of development.

G394 Summary of Comment 111: A commenter, a county, stated “through its own Conditions of Approval process, it [county] requires that certain water-efficient landscaping materials be provided to homeowners and property maintenance firms. Because the county deals largely with developers and builders in the project entitlement process rather than the end-user,” commenter suggests “the directives to the local agency in Section 492.18 (a) may be better served by water purveyors, or collaborative partnerships between local agencies and water purveyors, who have relationships with the end user through meters and water bills.” Commenter stated” that many local water purveyors already have public outreach materials, web sites, and public demonstration gardens that address water-efficient landscaping.”

DWR Response: Reject. The public education provision is part of the existing regulation under California Code of Regulations, Title 23 Section 492 (d). Minor modifications were made to this and renumbered Section 492.16. This provision is an opportunity for local agencies to demonstrate water saving techniques and to showcase water efficient landscapes directly to homeowners whose outdoor landscape water use is generally 30-50% of their total residential water. Many water purveyors already conduct educational programs targeted at homeowners; however, the statute was directed at local agencies. DWR does not have authority to direct the regulation at water purveyors. In that light, the Ordinance was modified to *encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Section 490 (b) (6).*

G395 This response was not revised.

G396 Summary of Comment 81: A commenter suggested “the promotion of technologies through massive and ongoing public awareness campaigns, training and licensing requirements of landscape professionals (and quasi professionals), training of retailers, and creation of TV shows (e.g. HGTV).”

DWR Response: Reject. The public education provision is part of the existing regulation under California Code of Regulations, Title 23 Section 492 (d). Minor modifications were made to this and renumbered Section 492.16. The Department supports and recognizes the special training and licensing requirements of landscape professionals. However, there are many organizations (such as local water purveyors and landscape professional trade organizations) who are better equipped to provide training, certification, and licensing programs for professionals in the landscape industry.

Section 492.17 Environmental Review

There were no public comments addressing this section in the 45 day comment period.

Section 493.1 Irrigation Audit, Survey and Water Use Analysis Provisions for Existing Landscapes

G397 Summary of Comment 74: Commenter stated that irrigation audit requirements are redundant in some areas; that many water agencies already offer both residential and large landscape audits; that it does not make sense to duplicate the process.

DWR Response: Accept. This section has been modified significantly to address this concern. Ongoing, mandatory audits for existing landscapes have been deleted. New language requires local agencies to administer programs verifying that landscape water use does not exceed MAWA, or, for landscapes that do not have a water meter, verifying proper operation of the irrigation system and preventing water waste.

G398 Summary of comment 78: Commenter recommended auditing existing landscapes only if they exceed one acre.

DWR Response: Accept. This section has been modified and is now only applicable to existing landscapes, installed before January 1, 2010, that are over one acre in size.

G399 Summary of Comments 62, 78: Commenters state the draft Model Ordinance provisions extend beyond the language in the statute addressing existing landscapes; that the draft Model Ordinance requires monitoring of existing landscapes which was not addressed in the previous landscape ordinance or directed in the language of the statute.

DWR Response: Reject. Irrigation audits for existing landscapes are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9)), included here for reference;

§ 493. *Provisions for Existing Landscapes.*

(a) Water management

All existing landscaped areas to which the city or county provides water that are one acre or more, including golf courses, green belts, common areas, multi-family housing, schools, businesses, parks, cemeteries, and publicly owned landscapes shall have a landscape irrigation audit at least every five years.

AB1881, the statute (Statute of 2006 Chapter 559) directed DWR to update the existing Ordinance. Section 65595 states, “*(a) (1) To the extent funds are appropriated, not later than January 1, 2009, by regulation, the department shall update the model water efficient landscape ordinance adopted pursuant to Chapter 1145 of the Statutes of 1990, after holding one or more public hearings. The updated model ordinance shall be based on the recommendations set forth in the report prepared pursuant to Chapter 682 of the Statutes of 2004 and shall meet the requirements of Section 65596.*”

G400 Summary of Comment 45, 140: Commenters stated that the provisions for existing landscapes do not belong in the Model Ordinance; that the ordinance is an irrigation and landscape design guide; that provisions for existing landscapes is more related to ongoing maintenance and operation and should not be contained herein. Commenter suggested removing provisions for existing landscapes.

DWR Response: Reject. Irrigation audits for existing landscapes are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9)). AB 1881 directed DWR to update the existing Ordinance. See references above.

Section 490 of the revised Ordinance sets out the purpose, which is much greater than providing guidance in irrigation and landscape design.

Section 490 Purpose

(b) Consistent with these legislative findings, the purpose of this model ordinance is to:

(1) promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;

(2) establish a structure for planning, designing, installing, and maintaining and managing water efficient landscapes in new construction and rehabilitated projects; and

(3) establish provisions for water management practices and water waste prevention for established existing landscapes. ;

(4) use water efficiently

G401 This response was not revised.

G402 Summary of Comment 87: Commenter stated that if the Department insists upon requiring mandatory irrigation audits for existing landscaped areas, it would seem more appropriate to phase-in audits to allow for water agencies and local jurisdictions to develop and implement retrofit or rehabilitation programs.

DWR Response: Accept. This section has been modified significantly to address this concern. Ongoing, mandatory audits of existing landscapes have been deleted. New language requires local agencies to administer programs verifying that landscape water use does not exceed MAWA, or, for landscapes that do not have a water meter, verifying proper operation of the irrigation system and preventing water waste.

G403 Summary of Comment 77: Commenter stated that the provisions could mean that all existing irrigation systems would have to be renovated and that homeowners would have to install expensive underground irrigation systems; that this is excessive and a huge impact on property owners.

DWR Response: Reject. Irrigation audits for existing landscapes are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9)). Significant modifications were made to the irrigation audit sections in order to ease the burden and were renumbered as Section 493.1 (existing landscapes).

The new language is;

§ 493.1 Irrigation Audit, Irrigation Survey and Irrigation Water Use Analysis

(a) This section, 493.1, shall apply to all existing landscapes that were installed before January 1, 2010 and are over one acre in size.

(1) For all landscapes in 493.1(a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as: $MAWA = (0.8) (ET_o)(LA)(0.62)$.

(2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

(b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

The Ordinance does not and is not intended to require that existing irrigation systems be renovated. For those existing landscapes that are audited or surveyed, they must follow recommendations regarding operation and maintenance in order to increase the efficiency of the system. This could simply mean adjusting irrigation run times, repairing broken sprinklers or changing sprinkler heads, but not complete renovation as suggested in the comment.

G404 Summary of Comments 33, 66, 82, 85, 108: Multiple commenters stated that the landscape area on existing properties is generally unknown so there is no way to compare water use against local ET without knowing area; this will require an inventory of ALL properties to determine which ones exceed 2,500 sq. ft.

DWR Response: Accept and reject in parts. Irrigation audits for existing landscapes are part of the existing regulation (California Code of Regulations, Title 23 Section 492 (c) (9)). Significant modifications were made to the irrigation audit sections and renumbered as Section 493.1 (existing landscapes). The existing landscapes that will be held to MAWA must meet the following criteria:

1. Installed before January 1, 2010;
2. Over one acre in size; and
3. Have a water meter.

GIS tools allow local agencies to determine which landscapes exceed one acre.

G405 Summary of Comments 58, 62, 77, 82, 87, 88, 90, 111, 115, 167: Multiple commenters ask who will track and monitor the receipt of large landscape audit reports every five years.

Commenters stated that it is unclear what is intended to be accomplished with the data collected.

DWR Response: Accept in part. The requirement for mandatory landscape audits every five years has been removed. Local agencies will be responsible for specifying how the required documentation associated with the Ordinance will be used.

G406 Summary of Comments 16, 18, 20, 33, 42, 45, 50, 55, 58, 59, 62, 68, 73, 76, 77, 78, 81, 84, 87, 88, 91, 98, 102, 110, 111, 115, 123, 140, 152, 164, 167, 168: Multiple commenters stated that the requirements for audits and surveys on existing landscapes will create a significant cost to local agencies and water districts; that these requirements would place an untold burden on local agencies; that the logistics would be staggering; that the requirements are not enforceable; that many local agencies lack the resources to implement such on-going audits and to compile and analyze the resulting data.

DWR Response: Accept in part. This section has been modified significantly to address these concerns. Ongoing, mandatory audits for existing landscapes have been deleted. New language requires local agencies to administer programs verifying that landscape water use does not exceed MAWA, or, for landscapes that do not have a water meter, verifying proper operation of the irrigation system and preventing water waste. This new language allows local agencies increased flexibility for managing water use in existing landscapes.

G407 Summary of Comments 55, 58, 59, 62, 164: Multiple commenters stated that the Initial Statement of Reasons failed to consider the expense of audits and surveys.

DWR Response: Accept in part. This section has been modified significantly to address this concern. To help reduce costs, ongoing, mandatory audits for existing landscapes have been deleted. New language requires local agencies to administer programs verifying that landscape water use does not exceed MAWA, or, for landscapes that do not have a water meter, verifying proper operation of the irrigation system and preventing water waste. This new language allows local agencies increased flexibility for managing water use in existing landscapes. Costs are addressed in the Initial Statement of Reasons the Final Statement of Reasons, Economic and Fiscal Impact Statement Form 399, and Supplement Report to the Department of Finance. Recognizing the concerns about costs, the updated Ordinance attempts to streamline procedures and reduce costs to the extent possible.

G408 Summary of Comments 20, 68, 73, 84, 88: Commenters stated that there are not enough auditors in California to carry out the number of irrigation audits required in the Model Ordinance and recommended striking the need for mandatory water audits.

DWR Response: Accept. The requirement for mandatory irrigation audits for existing landscapes has been removed from the Ordinance.

G409 Summary of Comment 58, 59, 62, 82, 102, 111: Several commenters stated that audits and surveys should be the responsibility of water purveyors not local agencies; that the Model Ordinance includes a requirement to compare water use against the MAWA; that this makes the requirements dependent on local water agencies. Commenters suggested preparing separate enforcement legislation directed to water purveyors and directing these requirements to the water purveyor.

DWR Response: Accept in part. The statute, AB1881 (Statute of 2006 Chapter 559) authorized DWR to direct the regulation to cities and counties, not to water agencies. In order to address this concern, the Ordinance was modified to encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Water Efficient Landscape Ordinance or its local landscape ordinance, Sections 492 and 493.

G410, G411, G412 These responses were not revised.

G413 Summary of Comments 55, 58, 59, 62, 77, 88, 100, 151, 164: Commenters stated that requiring routine or mandatory audits is excessive; recommended developing criteria to trigger an audit, such as, requiring an audit for a third offense only, or only for those sites where there has been a violation of a water waste ordinance, or only if the property exceeds the stormwater provision, or only for the worst 20%.

DWR Response: Accept. The requirement for mandatory irrigation audits for existing landscapes has been removed from the Ordinance.

G414 Summary of Comments 16, 50, 55, 59, 82, 84, 87, 90, 167, 168: Commenters stated that it is unlikely that residents would grant permission to enter their property for a landscape irrigation audit that they will be required to pay for. Commenters asked “What do you think that the chances will be that they will give us permission if they know that it will result in a charge? Or does this propose that we shut off their water to meet the State mandate?” Commenters recommended that the audit requirement should be removed and replaced with a more stringent water waste prohibition requirement.

DWR Response: Accept in part. Local agencies are no longer required to conduct mandatory audits, of existing landscapes but are now required to administer programs verifying that landscape water use does not exceed MAWA, or, for landscapes that do not have a water meter, verifying proper operation of the irrigation system and preventing water waste. In cases where it may be necessary to gain access to a property for purposes of conducting an irrigation audit or survey, the local agency would be responsible for developing procedures for gaining access.

G415 Summary of Comments 55, 123, 167: Commenters stated that recovering cost for audits and surveys may not be realistic; that it is unreasonable to expect recovery of costs for an audit from a property owner that did not request the audit; that raising fees in an amount sufficient to cover this cost would not be palatable to the public. Commenter stated that since Proposition 218, assessing fees to property owners has become more difficult and cumbersome for public agencies. Some local agencies may not be able to provide for-payment-services based on their city charter. Commenters recommended removing landscape auditing and surveying requirements from the

Model Ordinance. Commenters also recommended reducing the burden by exempting landscapes subject to tiered rates.

DWR Response: Accept in part. Local agencies are no longer required to conduct mandatory audits of existing landscapes, but are now required to administer programs verifying that landscape water use does not exceed MAWA, or, for landscapes that do not have a water meter, verifying proper operation of the irrigation system and preventing water waste. Costs are addressed in the Initial Statement of Reasons and the Final Statement of Reasons, Economic and Fiscal Impact Statement Form 399, and Supplement Report to the Department of Finance. Recognizing the concerns about costs, the updated Ordinance attempts to streamline procedures and reduce costs to the extent possible.

Section 493.2 Water Waste Prohibitions

G416 Summary of Comment 74: A commenter, a city, stated “they already impose penalties for wasted water, over spray, etc. and suggests instead of penalizing minor infractions such as low head drainage to concentrate on the satisfaction of the water budget for a project.”

DWR Response: Reject. The provision for water waste prohibitions is an existing regulation (California Code of Regulation, Title 23 Section 493 (b)) and does not duplicate existing local agency water waste prohibitions. The existing language (1992) for this provision was restored and the noticed language (February 2008) was deleted. Also, this section was renumbered Section 493.2. Low head drainage can result in significant water waste and should not be ignored in favor of the water budget. Eliminating low head drainage can have positive effect in making it easier for a site to use less water than the water budget allows. It is reasonable to require that irrigation systems be efficient from the start. Because the statute does not authorize it, the Model Ordinance does not list or describe penalties other than stating that the local agency may establish them locally. Low head drainage can result in significant water waste and should not be ignored in favor of the water budget. Eliminating low head drainage can have positive effect in making it easier for a site to use less water than the water budget allows.

G417 Summary of Comment 90: A commenter stated “the water waste requirements in the proposed Model Ordinance are already required as part of Urban Water Management Plan BMP implementation and they should not be contained in a landscape ordinance.”

DWR Response: Reject. The provision for water waste prohibitions is an existing regulation (California Code of Regulation, Title 23 Section 493 (b)) and does not duplicate existing local agency water waste prohibitions or any demand management measure. The existing language (1992) for this provision was restored and the noticed language (February 2008) was deleted. Also, this section was renumbered Section 493.2. Water waste frequently occurs during landscape irrigation; therefore it is appropriate to prohibit water waste in a landscape water efficiency ordinance. And nothing prevents an agency from asserting that compliance with the Ordinance is

achieved by providing evidence of their Plan’s BMP implementation, and vice-versa, to the extent the requirements are consistent.

G418 Summary of Comments 59, 100: Commenter stated that the proposed Model Ordinance should include stronger water waste prohibitions in lieu of the audit requirement and provided the following language: “Water waste resulting from inefficient landscape irrigation, such as runoff, low head drainage, overspray, over-irrigation above a maximum applied water allowance, etc. is prohibited. Conditions where water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, pathways, or structures are also prohibited. Penalties for violations may include warning letters, citations, monetary penalties, fines. First time violators may receive an audit and technical assistance in lieu of paying a fine. Persistent violators shall be mandated to obtain an audit to assess irrigation efficiency and make recommendations for improvements and repairs.”

DWR Response: Reject. The provision for water waste prohibitions is an existing regulation (California Code of Regulation, Title 23 Section 493 (b)) and does not duplicate existing local agency water waste prohibitions. The existing language (1992) for this provision was restored and the noticed language (February 2008) was deleted. Also, this section was renumbered Section 493.2. An irrigation audit can bring attention to deficiencies in a new irrigation system. These can be immediately repaired and the function would be optimal from the outset. The department has determined that the provision regarding water waste is sufficient. The commenter listed penalties and administrative procedures for penalizing wasters of water. The department has determined that consistent with the statute’s intent, these should be administered locally.

G419 Summary of Comment 62: A commenter stated that the proposed Model Ordinance “requires monitoring of existing landscapes, which was not addressed in the previous Model Ordinance [AB 325] or directed in the language of AB 1881.”

DWR Response: Reject. The provision for water management of existing landscapes is part of the existing regulation (California Code of Regulation, Title 23 Section 493 (a)). In the existing regulation, existing landscapes were subject to audits every five years unless meter readings indicated that the landscape uses less water than the assigned MAWA. Including provisions addressing existing landscapes in the Ordinance is warranted and consistent with AB 1881’s intent, should be part of a comprehensive water conservation policy.

Section 494 Effective Precipitation

G420, G421, G422, G423, G424 These responses were not revised.

Section 495.1 Appendix A-ETo Tables

G425, G426, G427, G428, G429, G430, G431, G432, G433, G434, G435 These responses were not revised.

E. SUMMARY AND RESPONSES - PUBLIC COMMENTS RECEIVED DURING THE 2ND 15-DAY COMMENT PERIOD

During the 2nd 15-day public comment period, May 11-26, 2009, the Department received 27 public comments. Three additional comments were received after the close of the public comment period. Please refer to the Department's rulemaking file for copies of these comments. Pursuant to Government Code Section 11346.9 (a) (3) and (a) (5), the Department has summarized and responded to the comments below.

Section 490 Purpose

Summary of Comment 5.1: Commenter suggests reverting wording from the stricken word "shall" back to the word "should".

DWR Response: 490 (a) (5) text was modified to change the word "shall" to "should". This was done in response to public comment and to reflect the legislative findings.

490.1 Applicability

Summary of Comment 5.2: Exclude owner-built and developer-built single-family residences on single lots that are not part of a subdivision or other such larger development project.

DWR Response: Reject. Single family residences on single lots, that are not part of a subdivision, which meet the criteria in the applicability section, will not be excluded from the Ordinance because there is potential for significant water savings.

Summary of Comment 5.2, 25.3: Ambiguity exists for speculative family homes. Request clarification as to whether speculative family homes fall into section 490.1 (a) (2) or 490.1 (a) (3). Commenters request the ordinance includes a definition for "homeowner" in order to clearly distinguish this category of project.

DWR Response: Accept in part. Definition of (u) "homeowner provided landscaping" has been expanded as follows: *"homeowner-provided landscaping" means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this ordinance, is a person who occupies the dwelling he or she owns. This excludes speculative homes, which are not owner-occupied dwellings.*

Summary of Comment 29.1: Existing cemeteries, many of them run by private, for-profit companies, are some of the worst offenders as regards water waste. They should not be exempted from Section 493.1 but treated the same as schools and other landscaped areas over one acre. Section 493.2 prohibiting water waste should also be applied to cemeteries.

DWR Response: Reject. The statute (Statutes of 2006, Chapter 559), explicitly states that cemeteries shall be exempt from certain provisions of the Ordinance. The Model Ordinance regulates cemeteries in accordance with AB1881, subjecting new and rehabilitated cemeteries to Sections 492.4, 492.11, 492.12 and existing cemeteries to sections 493.1 and 493.2. These regulations cannot permit what the statute does not.

Summary of Comment 29.2: Plant collections should be more widely interpreted to include all native plant collections, in public or private gardens. This will provide additional incentives to retain and/or install water-thrifty indigenous plants with temporary irrigation systems.

DWR Response: Reject. Most California native plant collections can perform well below a MAWA with an ETAF of 0.7. For that reason, it is not necessary to expand the interpretation of plant collections, as used in Applicability Section 490.1 (b) (4), to include native plant collections in private gardens. Plant collections in botanical gardens and arboretums have been granted an exemption because they contain a wide variety of plants, including valuable, rare, and endangered species that have specialized maintenance requirements.

491 Definitions

Summary of Comment 19.1: Irrigation scheduling section requires that all irrigation scheduling shall use automatic irrigation systems and ET data. We propose that the language be clarified to say *“When irrigation scheduling uses automatic irrigation systems, evapotranspiration data such as those from CIMIS or other weather or soil moisture data shall form the basis of the irrigation schedule.”*

DWR Response: Accept in part. The use of automatic irrigation systems is not optional; this is specified in the statute. However, the language in this section has been modified to clarify that either evapotranspiration data or soil moisture sensor data may be used to schedule the irrigation events. Also, the definition of “controller” has been modified to reflect this change and maintain consistency throughout the document.

Summary of comments 2.1, 14.5, 21.4, 23.2, 25.6: Several commenters suggested changes to the definition of invasive species. Most commenters suggested a definition provided by California Invasive Plant Council.

DWR Response: Accept. The definition has been changed to that provided by the Cal-IPC as follows: “invasive plant species” means species of plants not historically found in California that spread outside cultivation and that damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. “Noxious weeds” means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list.-Lists of invasive plants are maintained at the California Invasive Plant Inventory, and the USDA Invasive and Noxious Weeds database.

Summary of comments 2.3, 21.4, 22.1, 23.2: Stated that there is no definition of noxious plants and that we should adopt one based on California Invasive Plant Council’s (Cal-IPC) definition.

DWR Response: Accept in part. DWR recognizes that defining noxious weeds could be useful for the purposes of implementing the Ordinance. The following definition has been added to the Ordinance, within the definition of “invasive plant species”: *“noxious weeds” means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list.*

Summary of comment 2.2:

Commenter requests that the California Invasive Plant Council (CAL-IPC) be referenced in the regulation.

DWR Response: Accept. The Cal-IPC is now referenced in the definition of invasive plants.

Summary of comments 13.4, 21.1, 21.2, 26.4: Several commenters state the Model Ordinance needs to define irrigation consultant.

DWR Response: Reject. The term “irrigation consultant” has been removed from the text of the Ordinance. The only place this term was used was in Section 492.7 (b) (7), where it was listed as an acceptable signature on the irrigation design plan. The authority for an irrigation consultant to provide design services is listed in the referenced codes. Therefore, it is not necessary to specifically list “irrigation consultant” here. The listing of persons in the text of the Ordinance who are allowed to sign the design plans is not exhaustive. It would be unduly cumbersome to include each person and their allowable duties, as stated in laws and codes, in the text of the Model Ordinance. In order to keep the language in the Ordinance brief, the relevant sections of applicable laws and codes identifying individuals authorized to sign design plans are referenced.

Summary of comments 6.1, 10.1: Suggests including definitions for “garden designer” and “landscape designer”.

DWR Response: Reject. It is not necessary to include the requested definitions as the terms are not used in the Ordinance. The listing of persons in the text of the Ordinance who are allowed to sign the design plans is not exhaustive. It would be unduly cumbersome to include each person and their allowable duties, as stated in laws and codes, in the text of the Model Ordinance. In order to keep the language in the Ordinance brief, the relevant sections of applicable laws and codes identifying individuals authorized to sign design plans are referenced.

Summary of comments 11.1, 11.2, 26.1, 26.2, 26.3: Commenters suggest correcting some typographical errors.

DWR Response: Accept. The errors have been corrected.

492 Provisions for New Construction or Rehabilitated Landscapes

No comments addressing current revisions.

492.1 Compliance with Landscape Documentation Package

No comments addressing current revisions.

492.2 Penalties

No comments addressing current revisions.

492.3 Elements of the Landscape Documentation Package

No comments addressing current revisions.

492.4 Water Efficient Worksheet

Summary of Comments 11.3, 24.1: In the definition of terms used in the MAWA calculation, commenters suggest adding the initials “ETAF” to the term “ET Adjustment Factor, adding “per year” to parentheses after Eto and the word “to gallons” to Conversion Factor.

DWR Response: Accept. Changes have been made.

Summary of Comment 23.4, 23.7, 26.6: Place parentheses in bracketed portion of the MAWA formula:

[(0.7 x LA) + (0.3x SLA)] on pages 14 (3 places) and p35 (2 places)

DWR Response: Accept. Parentheses have been added to the MAWA formula.

492.5 Soils Report

Summary of Comment 13.2, 26.2: Commenter asks in section 492.5(a)(1)(B)6: remove comma after the semi-colon

DWR Response: Accept. Text of Ordinance has been changed accordingly.

Summary of Comment 25.5: Submittal of soil plan is required - however, components of the plan "MAY" be submitted by the applicant. Recommend that DWR clarify the components that establish an adequate soil management plan.

DWR Response: Reject. Because this is a Model Ordinance intended for statewide use, it cannot address specific regional soil conditions. Local agencies may address specific regional conditions in their adopted local ordinance.

Summary of Comment 29.3: An additional impediment to planting desert natives would be removed if native plantings were exempted - soil tests which will show that our arid soils require organic matter for moisture and nutrient retention will have been avoided. Coachella Valley and high desert agencies specify that desert natives must be planted in native soils which are required for healthy growth.

DWR Response: Reject. The designer of the landscape plan may modify the soil amendments based on the requirements of the selected plant species. Because this is a Model Ordinance intended for statewide use, it cannot address specific regional conditions, such as those mentioned by the commenter. Local agencies may address specific regional conditions in their adopted local ordinance.

492.6 Landscape Design Plan

Summary of comments 2.3, 2.4, 21.5: Recommends strengthening the recommendation against choosing invasive plants in the landscape design plan.

DWR Response: Accept. The provision has been modified based on input from the California Invasive Plant Council.

Summary of comment 12.1: Commenter suggests adding “pest resistance” to the list of recommended factors considered in plant selection.

DWR Response: Accept. Pest resistance is included as a recommendation in consideration of plant selection.

Summary of comment 13.3: Commenter asks that section 492.6 (b) include words "Government Code" in citation

DWR Response: Accept. This has been corrected.

Summary of comment 22.2: Following the statement of compliance, it is suggested to read: "bears" the signature of a licensed professional... or that the statement "and is signed by a licensed professional." Somehow the sentence is not clear the signature is required. This could be problematic especially when dealing with compliance issues.

DWR Response: Accept. The language of this provision has been modified as follows, (13) “*bears* the signature of ...”

Summary of comment 9.5: Commenter states that in Section 492.6 (b)(13) Certified Arborists and University of CA Certified Master Gardeners should be included as trees and many other plants are frequently improperly watered.

DWR Response: Reject. Existing laws and codes designate who is authorized to design a landscape or irrigation system. The certification for Arborist and Master Gardener, in and of itself, does not provide an individual the authority to design landscapes or irrigation systems. Certified arborists are experts on the pruning and care of trees and shrubs. Master Gardeners do not consult or perform services on non-residential landscapes and may only give advice to residential gardeners. DWR must conform to existing laws and codes in the update of the Model Ordinance.

Summary of comments 6.1, 7.1, 10.1, 14.6, 18.1, 21.1, 27.1: Commenters suggest the explicit inclusion of “landscape designer”, “garden designer”, and “certified landscape professional” as allowable signatories of landscape plans.

DWR Response: Reject. The listing of persons in the text of the Ordinance who are allowed to sign the design plans is not exhaustive. It would be unduly cumbersome to include each person and their allowable duties, as stated in laws and codes, in the text of the Model Ordinance. In order to keep the language in the Ordinance brief, the relevant sections of applicable laws and codes identifying individuals authorized to sign design plans are referenced.

492.7 Irrigation Design Plan

Summary of Comments: 14.7: A commenter stated that wind sensors should only be recommended not required, since they are of limited availability and are economically infeasible for single family homes.

DWR Response: Reject. Wind sensors are only required where they are appropriate for local climatic conditions and as specified in the adopted local ordinance.

Summary of Comments: 14.8: A commenter stated that “the addition of the words, “the highest possible” in the clause is inappropriate in a setting where the measure should be suitability of application rate and uniformity of coverage. Too often, sprinklers applying water at the “highest possible” distribution instead fog and water overspray results. We recommend replacing the phrase with “intended” or “appropriate”).

DWR Response: Reject. The text of the Ordinance states “...sprinkler spacing shall be designed to achieve the highest possible distribution **uniformity** using the manufacturers’ recommendations.” It seems the commenter refers to the term “distribution” as the distance of the spray, yet the text uses this term in the phrase “distribution uniformity”, which is meant to refer to the suitability of application rate and uniformity of coverage, consistent with the commenter’s concern.

Summary of Comments: 29.4: Commenter states that irrigation consultants should not be allowed to sign irrigation design plans, as they are not a licensed or certified occupation.

DWR Response: Reject.

The term “irrigation consultant” has been removed from the text of the Ordinance. The authority for an irrigation consultant to provide design services is listed in the referenced codes. *“Irrigation consultants may engage in the practice of, or offer to practice as, an irrigation consultant. May perform professional services, such as consultant, investigation, reconnaissance, research, design, preparation of drawings and specifications and responsible supervision, where the dominant purpose of such service is the design of landscape irrigation, in accordance with accepted professional standards of public health and safety.”* Business and Professions Code 5641.6 Therefore, it is not necessary to specifically list “irrigation consultant” here. The listing of persons in the text of the Ordinance who are allowed to sign the design plans is not exhaustive. It would be unduly cumbersome to include each person and their allowable duties, as stated in laws and codes, in the text of the Model Ordinance. In order to keep the language in the Ordinance brief, the relevant sections of applicable laws and codes identifying individuals authorized to sign design plans are referenced.

Summary of Comments: 30.1: Define the term "Irrigation Consultant" to limit everyone from claiming this signature level status.

DWR Response: Reject in part and accept in part. The term “irrigation consultant” has been removed from the text of the Ordinance. The authority for an irrigation consultant to provide design services is listed in the referenced codes. *“Irrigation consultants may engage in the practice of, or offer to practice as, an irrigation consultant. May perform professional services, such as consultant, investigation, reconnaissance, research, design, preparation of drawings and specifications and responsible supervision, where the dominant purpose of such service is the design of landscape irrigation, in accordance with accepted professional standards of public health and safety.”* Business and Professions Code 5641.6 Therefore, it is not necessary to specifically list “irrigation consultant” here. The listing of persons in the text of the Ordinance who are allowed to sign the design plans is not exhaustive. It would be unduly cumbersome to include each person and their allowable duties, as stated in laws and codes, in the text of the Model Ordinance. In order to keep the language in the Ordinance brief, the relevant sections of applicable laws and codes identifying individuals authorized to sign design plans are referenced.

492.8 Grading Design Plan

Summary of Comment 11.4: Page 24 – “Licensed professional as required by law.” Is this referencing the State of California’s Landscape Architect’s Practice Act? Clarify.

DWR Response: Reject. The Model Ordinance does not list or cite the applicable laws and codes for the Grading Design Plan. The California Landscape Architects’ Practice Act, being in the Business and Professions Code, is applicable. The wording in this provision was modified slightly to improve clarity and accuracy as follows: “...and *shall bear* the signature of a licensed professional as *authorized* by law.” (modifications in *italics*)

Summary of Comment 14.6: On page 19, §492.6 (b)(13) and page 22 §492.7 (b)(7) and page 24 §492.8 (a) (3): Restricting Landscape, Irrigation, and Grading design to license holders under the quoted sections of the Business and Professions, the California Code of Regulations, and the Food and Agricultural Code is unduly restrictive to unlicensed but competent and knowledgeable individuals of irrigation and garden-design practices who perform landscape design services as employees or contractors of retail and service companies including, but not limited to, residential homebuilders, nurseries, garden centers, home improvement stores, plumbing companies, hardware stores. Such a restriction is also a barrier to skilled private citizens capable of performing landscape work to code requirements which, in any instance, are no more burdensome than typical building codes commonly performed by private homeowners. The three sections should be modified to provide limited definition restricting them to projects of sufficient scope or slope to warrant reasonable cause.

DWR Response: Reject. Existing codes allow certain unlicensed individuals to prepare some documents required by the Ordinance. DWR must conform to existing laws and codes in the update of the Model Ordinance. It is outside the scope of DWR’s authority, under AB1881, to alter these laws and codes. The authorized individuals and the scope of their work are defined by existing laws and codes and they should comply with them.

Summary of Comment 22.2: Following the statement of compliance, it is suggested to read: "bears" the signature of a licensed professional... or that the statement "and is signed by a licensed professional." Somehow the sentence is not clear the signature is required. This could be problematic especially when dealing with compliance issues.

DWR Response: Accept. The language of this provision has been modified as follows, (3) “*shall bear* the signature of ...”

492.9 Certificate of Completion

No comments addressing current revisions.

492.10 Irrigation Schedule

Summary of Comment 19.1: Request for clarification in Section 492.10 (a) (1). As stated, this is very prescriptive, requiring that all irrigation scheduling shall use automatic irrigation systems and ET data. We propose that the language be clarified to say “*When irrigation scheduling uses*

automatic irrigation systems, evapotranspiration data such as those from CIMIS or other weather or soil moisture data shall form the basis of the irrigation schedule.”

DWR Response: Accept in part. The use of automatic irrigation systems is not optional; this is specified in the statute. However, the language in this section has been modified to clarify that either evapotranspiration data or soil moisture sensor data may be used to schedule the irrigation events.

492.11 Landscape and Irrigation Maintenance Schedule

No comments addressing current revisions.

492.12 Irrigation Audits, New and Rehab Landscapes

Summary of Comment 29.6: In section 492.12(a) Irrigation Association standards were omitted for auditing. They are needed to insure that meaningful audits are performed uniformly.

DWR Response: Reject. The reference to the Irrigation Association training manual was deleted from the Ordinance because it states, explicitly, in the text of the manual, that the manual is in draft form and is not to be used for regulatory purposes. Certification through the Irrigation Association Auditor training program, or comparable program as stated in the definition of Certified Landscape Irrigation Auditor, is deemed sufficient to ensure that the audits are meaningful and performed uniformly.

492.13 Irrigation Efficiency

No comments addressing current revisions.

492.14 Recycled Water

No comments addressing current revisions.

492.15 Stormwater Management

Summary of comment 14.10: Section 492.15 (c) Rain gardens: This is an undefined term subject to many interpretations. It should be included in the definitions section of the document.

DWR Response: Accept. A definition of rain gardens has been included in the Ordinance, section 491, as follows: *“rain garden” means a planted depression that allows rainwater runoff from impervious areas the opportunity to be absorbed.*

Summary of comment 24.2: Suggests changes to the stormwater management provisions to encourage more rainwater capture. (c) Rain gardens, cisterns and other landscapes features and practices that increase rain water rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.

DWR Response: Accept. The changes have been made to the stormwater section.

492.16 Public Education

No comments addressing current revisions.

492.17 Environmental Review

Summary of Comment 22.3: Quite possibly the actual "exemption" may be useful here, instead of the outright deletion of the sentence. For instance, a categorical exemption, such as Class 7, "Actions by Regulatory Agencies for Protection of Natural Resources" may be applicable. Authority cited: Section 21083, Public Resources Code; reference: Section 21084, Public Resources Code.

DWR Response: Reject. This line has been deleted because the Model Ordinance is not subject to CEQA review, as opposed to being exempt from CEQA. The language of the Ordinance should be regulatory or make a recommendation.

493 Provisions for Existing Landscapes

No comments addressing current revisions.

493.1 Irrigation Audits, Existing Landscapes

Summary of Comment 8.1: For older landscapes, landscape water use commonly exceeds the MAWA and recommendations to improve efficiency are needed. As written, this section could be interpreted that existing irrigation systems must be improved in order to complete the verification. To clarify implementation of this section, we request that the language be changed as follows: "The local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation surveys, and irrigation audits *to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes.*"

DWR Response: Accept. Section 493.1 (a) (1) has been modified as follows: "the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation surveys and irrigation audits ~~that verify landscape water use~~ *to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes.*"

Section 493.1 (a) (2) has been modified as follows: "the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits ~~that verify proper operation of the irrigation system and~~ *to evaluate water use and provide recommendations as necessary in order to prevent water waste.*"

Summary of Comment 11.6: Page 30, Section 493.1- Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis. This still represents an un-funded mandate that agencies will be obligated to perform once this legislation comes into effect. If the text were to read as follows, "the local agency may administer programs" then local agencies would have the right carry out audits

in instances where they see water being wasted but would not be obligated to carry them out across the board.

DWR Response: Accept in part. Mandatory, ongoing audits of existing landscapes have been deleted from the revised Ordinance. Audits are listed as only one of the allowable methods for determining landscape water use. Those local agencies that are signatories to the California Urban Water Conservation Council MOU will perform these actions as part of their BMP implementation. Where the local agency is not a water purveyor, the Ordinance states in Sections 492 (a) and 493 that local agencies may designate other agencies, such as a water purveyor, to implement some or all of the requirements. Many of these water purveyors are signatories to the MOU and will already be doing these actions as part of their BMP implementation. So long as the actions are accomplished, it matters little whether the water purveyor or local agency does them. The issue of costs is addressed in the Initial and Final Statement of Reasons and the Supplement Report to the Department of Finance.

Summary of Comment 16.1: (a) This section, 493.1, shall apply to all existing landscapes that were installed before January 1, 2010 and are over one acre in size. Does this apply for projects requiring a building or landscape permit, plan check or design review? Or do you expect the local agency to be proactive in pursuing irrigation audit, irrigation survey and irrigation water use analysis?

DWR Response: Reject in part. This section applies to all existing landscapes installed before January 1, 2010 and over one acre in size, as stated. Requirements for permits, plan checks and design reviews do not apply to existing landscapes, unless they are rehabilitated and meet the requirements of Section 490.1 (a). The local agency is expected to be proactive in pursuing the administration of programs, as stated. The programs MAY include pursuing irrigation audit, irrigation survey and irrigation water use analysis. These are not obligatory, nor the only means for determining landscape water use.

Summary of Comment 16.2: (1) & (2) For all landscape in 493.1(a) that have a water meter, the local agency... Does this meter refer to a dedicated "irrigation" meter or mixed meter?

DWR Response: Reject in part. This refers to both types of water meters, dedicated irrigation meters and mixed use meters. If a property has a meter, it is possible to measure or estimate the water used for irrigation. A dedicated meter allows direct measurement, while a mixed use meter allows for adequate estimation. Therefore, these properties can be regulated using MAWA.

Summary of Comment 28.1: Did you intend not to include a frequency of the water use analysis?

DWR Response: Reject. DWR did not include a frequency for water use analysis in order to allow a greater degree of flexibility for local agencies and water purveyors, whose methods of water use analysis vary widely across the state. This can be determined by the local agency.

493.2 Water Waste Prevention

Summary of comment 14.11: Zero irrigation runoff sets a very high bar indeed. The language would be improved by inclusion of modifiers such as “chronic runoff,” “due to improperly maintained and operating irrigation equipment,” and “eliminating site conditions such as soil compaction, erosion water channeling, or excessive turfgrass thatch” that are contributing causes leading to runoff. Penalties should be reserved for failure to comply actions and chronic offenders.

DWR Response: Reject. The Ordinance states that local agencies shall prohibit runoff. As with any prohibition, this does not eliminate the activity, whether it is speeding, loitering, etc...but authorizes the local agency to issue a penalty. The language suggested by the commenter is not necessary as the phrase “...or other similar conditions” is included in the text of the Ordinance. Local agencies are authorized to establish penalties that they deem are appropriate and the conditions for assessing them.

Summary of comment 15.4: Commenter suggests adding the word “runoff” in subsection (b) after the word “overspray” since the sections below it refer to both runoff and overspray.

DWR Response: Accept. The word “runoff” has been added to subsection (b).

494 Effective Precipitation

No comments addressing current revisions.

495.1 ETo Table

No comments addressing current revisions.