

MEETING SUMMARY

California Department of Water Resources

Independent Technical Panel for Demand Management Measures

March 4, 2016 | Meeting #28 | Public Comment Hearing

Prepared by the Sacramento State University, Center for Collaborative Policy

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1. ACTION ITEMS & AGREEMENTS

1. **Meagan Wylie**, working with **Lisa Maddaus and Dave Fujino**, to prepare multiple variations of a revised *Dot Chart of Recommendation Types* for inclusion in the Introduction Section, and circulate to the ITP for review and feedback.
2. **CCP, DWR and Dave Fujino** to revise the *Glossary of Terms* list. The current terms will be cross-referenced with MWELo definitions, and pared down to technical terms that principally appear in the section recommendations. This revised Glossary with definitions should be circulated to the ITP for review and suggested additions no later than April 4th.
3. **Penny Falcon and William Granger** to share definitions of terms developed by their agencies for reference in the Final Report Glossary, as applicable.
4. **CCP** to revise “Front Matter” and Section 3 of the report per discussion (details provided in meeting summary narrative, below).
5. **Ed Osann, Jeff Stephenson, and Peter Estournes** to draft new Recommendation on Executive Leadership for possible inclusion in the Final Report.
6. **Vicki Lake** to confer with Peter Brostrom, DWR, as to if landscape designers are allowed to complete MWELo calculations and the package submittal to DWR. If necessary, also consult with legal team.
7. **Section 10-1 Authoring Team** to determine recommendation title.
8. **CCP** to work with ITP and DWR to schedule an ITP webinar as soon as possible, no earlier than March 17th. **UPDATE:** The ITP Webinar has been scheduled for March 30th from 12:00 – 3:00 pm.

AGREEMENT: All ITP Members agreed to move forward the Introductory Section for public comment for the duration of the public comment period.

AGREEMENT: The ITP voted unanimously to use the revised Section 8-2 language provided by the authoring team in their Final Report.

2. WELCOME & OPENING REMARKS

The California Department of Water Resources (DWR) Independent Technical Panel (ITP) for Demand Management Measures met in San Diego, California for their twenty-eighth meeting on March 4, 2016 to accomplish the following objectives:

- Obtain feedback from members of the public on the ITP’s Public Draft Report on Landscape Water Use (Public Draft Report).

- Discuss development of Supporting Sections for inclusion in the ITP’s Final Report.

The ITP’s Public Draft Report on Landscape Water Use can be found on the DWR ITP webpage: <http://www.water.ca.gov/wateruseefficiency/sb7/committees/urban/u2/>.

Dave Ceppos, meeting facilitator from the Center for Collaborative Policy (CCP), California State University Sacramento, called the meeting to order, and gave thanks to the ITP members and the attending public for taking the day to join the ITP and provide feedback on the Public Draft Report. Participants were reminded that the written public comment period will remain open until March 13, 2016. The ITP intends to hold their final meeting, at which they will finalize their report, on April 14-15, 2016, at the CCP Offices in Sacramento. **UPDATE:** The ITP will also host a webinar on March 30, 2016 from 12:00 – 3:00 pm PST to continue several discussion threads from the March 4th meeting.

3. ITP DISCUSSION: FINAL REPORT SUPPORTING SECTIONS

A. Introductory Section

Members generally agreed there should be some delineation summarizing the various recommendations in the introductory section. A chart or matrix doing such would serve to bring the reader some context to the recommendations, and allow them to easily identify which recommendations they are interested in.

- One ITP member suggested the place holder dot chart on page 7 could be revised to simply indicate which recommendations are legislative recommendations and which are administrative actions.
- Another member indicated she preferred the way the dot chart is currently formatted, with the four categories.
- **ACTION ITEM:** Meagan Wylie, working with Lisa Maddaus and Dave Fujino, to prepare multiple variations of a revised Dot Chart of Recommendation Types for inclusion in the Introduction Section, and circulate to the ITP for review and feedback.
- **AGREEMENT:** All ITP Members agreed to move forward the Introductory Section for public comment for the duration of the public comment period.

B. Glossary of Terms

Per the request of the ITP made at their last meeting, CCP began compiling a list of terms to include in a Glossary of Terms based on an initial review of the Public Draft Report. Dave Fujino then reviewed this compilation and provided approximately 24 additional terms for consideration. The current draft list has 69 terms. The ITP was urged to consider that definitions will have to be drafted and agreed upon for each of the terms listed in the Glossary. This will require significant effort. Discussion followed:

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- The list should initially be cross-referenced with the terms defined in MWELO. This will eliminate the need to draft definitions for many terms.
 - If definitions are linked to MWELO, perhaps a line stating such should be added in the introductory text.
 - One member suggested attaching MWELO in its entirety, including its list of defined terms, as an Appendix to the report in support of Section 6.
- The following terms should be added: Landscape Architect; Landscape Designer; Landscape Contractor; Irrigation Consultant
- A number of the terms are very similar, with minor variations in wording. This is likely an artifact of having multiple authoring teams for the myriad recommendations. A normalization of terminology should be conducted for the report as a whole.
- The draft Glossary should be edited to include words/terms that are absolutely necessary, keeping in mind that those reading this report will have general familiarity with the subject matter.
- If the term is one that is being used in a Section *recommendation* (as opposed to being used in the Section background narrative), and the interpretation of the term has implicit consequences, it should be defined in the Glossary. This will primarily apply to terms of art or technical terms.
- Other planning codes where these terms may exist can be reviewed and cross-referenced where appropriate.

ACTION ITEM: CCP, DWR and Dave Fujino to work on revising the Glossary of Terms list. The current terms will be cross-referenced with MWELO definitions, and pared down to technical terms/terms of art that principally appear in the section recommendation. This revised Glossary with definitions should be circulated to the ITP for review and suggested additions no later than April 4th.

ACTION ITEM: Penny Falcon and William Granger to share definitions of terms developed by their agencies for reference in the Final Report Glossary, as applicable.

C. Key Strategies

Two Key Strategy documents were drafted and posted to the DWR Water Calendar in advance of this meeting. Two additional Key Strategy documents are in development, and yet another two are proposed but no drafting has commenced. The ITP was asked to discuss the value in including these various Key Strategies in the Final Report, and the next steps for completing these documents if applicable.

Discussion:

- Given the time constraints the Panel is currently facing, it will likely be difficult to produce and achieve consensus on a number of Key Strategy documents by April. While the aspirations of developing these documents is appreciated, perhaps the various

topics can be pared down to 1-2 paragraphs each. However, given its importance and emphasis throughout the report, the piece on *Watershed Approach* could include this expanded narrative as currently written, and be inserted into the front matter of the report.

- Several other members were supportive of this proposal.
- The Key Strategies documents did acquire length due the inclusion of the “opportunities and challenges” section. These are items this ITP did not carry forward but could be topics a future ITP may want to pick up.
- If significantly curtailed, these topics should not be couched as “Key Strategies” for fear of giving the wrong impression of their meaning.
- The front matter of the report should focus on the items the ITP did address and the report does support; not on items the ITP was not able to address.
- Note it was previously requested to include in an appendix of all topics the ITP previously considered.
- Suggested revision:
 - **Section 3-1:** Maintained as the Vision Statement as currently written.
 - **Section 3-2:** Watershed Approach narrative (extracted from the background section of the draft Key Strategy document)
 - **Section 3-3:** Key Actions to Support this Strategy (extracted from Page 3 of the Watershed Approach Key Strategy)
 - **Section 3-4:** The ITP recommendations Overview (currently beginning on Page 6 of the “front matter” document)

ACTION ITEM: CCP to revise “Front Matter” and Section 3 of the report per discussion (details provided in meeting summary narrative).

Public Comment:

- **Paul Herzog**, Surfrider Foundation: Mr. Herzog has offered to support the further development of the Watershed Approach narrative.

D. Proposal for Additional Recommendation on Executive Leadership

At the previous meeting, Ed Osann proposed the drafting of an additional recommendation addressing Executive Leadership that could be inserted as Section 11. The recommendation would:

- a) Acknowledge the leadership the Governor has shown to water issues and response to the drought, as well as the response of California citizens and residents to the call to conserve water.
- b) Recognize there are reasons why certain actions in support of landscape water use efficiency have not been taken in the past.
- c) Acknowledge the Governor is in a position to direct executive agencies to institute these new policies being proposed by the ITP.

- d) Request that the Governor roll up all of the ITP’s recommended administrative actions into an Executive Order (EO).

Members of the ITP were in support of preparing such a recommendation. Members of the authoring team will include: Ed Osann, Jeff Stevenson, and Peter Estournes.

ACTION ITEM: Ed Osann, Jeff Stephenson, and Peter Estournes to draft new Recommendation on Executive Leadership for possible inclusion in the Final Report.

4. PUBLIC COMMENT PERIOD

Speakers were asked to limit their comments to just the recommendation number at hand, rather than to provide all their comments on all recommendations at one time. This approach was taken as an effort keep the topics focused and limit lengthy, wide-ranging comments by any single member of the public. Based on the number of persons interested in providing comments on each recommendation, the facilitator identified a target time limit for each speaker, and a colored light kept the speaker aware of their time allotment. As a further effort to be cognizant of time limitation, the ITP members were encouraged to limit their conversation with the public to questions of clarification only.

Please note that comments captured in this meeting summary are not transcripts of the speakers’ statements; rather they are summarized to the best ability of the facilitation team. All public members were highly encouraged to additionally submit their verbal comments in writing to ensure their points are sufficiently understood by the ITP, and there are no accidental misinterpretations of their statements.

A. General Comments

- **Pamela Berstler**, Green Gardens Group (G3): The ITP’s recommendations on landscape water use efficiency (LWUE) unfortunately completely ignores the concept of “one water.” As discussed in the ITP’s report, LWUE only incorporates *system efficiency*, when in fact water use efficiency includes the capture, retention, and proper use and incorporation of rainwater into the system. The Public Draft Report should definitively address the benefits of using rainwater to support LWUE.
 - **ITP Member:** The watershed approach is discussed in detail in a draft *Key Strategy* document, which incorporates the use of rainwater into the system.

B. SECTION 3 – Vision Statement

- **Jack Karlin**, Turf Water Conservation Alliance (TWCA): TWCA endorses this overarching message. However, TWCA is in support of proper planning and plant selection as the appropriate method for achieving the goals of landscape water use reduction. The

explicit focus here on banning turf grass does a disservice to the Vision Statement’s root sentiment. The State would benefit from limits on use of *all* high-water plant material. TWCA recommends changing the message of the Vision Statement to address landscape conversion by targeting high water use plant materials generally. TWCA will submit written comments with suggested language revisions.

- **Paul Herzog**, Surfrider Foundation: The Surfrider Foundation thanks the ITP for their work on generating this Recommendations Report. Regarding the goal of reducing landscape water use by 50%, Surfrider does not believe that a target date of 20 years is soon enough. There is urgency to meet these goals sooner based on current climate conditions. The State is moving towards integrated water management, as most recently demonstrated by the State Water Resources Control Board’s (State Board) adoption of their water strategy, identify 23 activities to pursue including efficiently using rainwater. The ITP should work in collaboration with the State Board’s strategy. Addressing only irrigation efficiency and potable water use, and ignoring the benefits of rainwater, misses the essence of the watershed approach and the concept of “maximum health” of our landscaped environment. Surfrider will submit written comments with suggested language revisions to the Vision Statement.
- **Pamela Berstler**, Green Gardens Group (G3): Ms. Berstler is in agreement with Mr. Herzog’s comments. The 20-year time frame is not ambitious enough based on California’s climate reality and societal pace of change. The ITP should make transformational proposals. Additionally, the Vision Statement does not acknowledge that an unirrigated landscape is the ultimate water efficient landscape, nor does it embrace the watershed approach. The notion that turf removal is the primary answer to landscape water use reduction is inaccurate. It plays a role, but the creation of watershed-wise landscapes is key. G3 will provide written comments.
 - **ITP Member:** If available, please provide data or metrics that demonstrate some measure of pace of societal change in recent years in the written comments.
- **Rich Covert**, Sprinkler Pros: Sprinkler Pros is a company in Sacramento that focuses on sprinkler efficiency. Mr. Covert also agrees that the elimination of turf should not be the primary focus of the ITP’s recommendations. Proper application of water to appropriately selected turfs can achieve significant water savings. In one year, Sprinkler Pros’ water efficient nozzles were able to save 20 acre feet (AF) of water. The issue of poorly designed and installed sprinkler system is 60 or more years old. Antiquated sprinkler nozzles put out five times the amount of water as the new efficient nozzles do, which is a rate of watering much greater than what a lawn can actually absorb. The ITP’s recommendations should focus more on sprinkler efficiency and making water count where it is applied.
- **Pam Pavela**, Western Municipal Water District (WMWD): At the bottom of page 6, it is stated the goal is to reduce water use by 50% from pre-drought levels. Please consider the implications of recommending pre-drought levels as a baseline, and what has

already been done to reduce landscape water use. WMWD implemented water budget rates after 2011, and as a result customers reduced their water use by 28%. Other agencies should recognize that water budget rates are effective tools in getting people to change their water use habits because it hits them in their personal pockets.

- **Joe Berg**, Municipal Water District of Orange County (MWDOC): A 50% statewide reduction in water use is a lofty goal. The basis for recommending such a goal is not clearly identified in the Vision Statement, and it is recommended a better foundation for such be clearly described.
- **Joseph Gallegos**, Aquifer Pipe: XXX encourages the use of “alternative non-potable water sources” for landscape irrigation. This is preferred over greywater or recycled water as “nuisance” waters can more readily be used on landscape areas. Written comments will be provided to the ITP.
- **Cathy Pieroni**, City of San Diego: The ITP should better distinguish potable versus non-potable water and applied uses of each. The City of San Diego has a large recycled water purification project, and would advocate that potable reuse be treated in the same manner as recycled water. In San Diego, both classifications of water are filtered from the same discharged water collection. With regard to allowable functional turf, parks and places of public benefit should have a higher priority for allowable functional turf.
- **Chris Roesink**, Hunter Industries: The state should not fund additional turf removal programs if there are not yet metrics on the amount of water that has been saved from previous programs. The ITP should more closely look at irrigation efficiencies and water management efficiencies before advocating for large amounts of turf grass removal. Passive recreational spaces (e.g. parks and open spaces where gatherings occur) should be allowed certain turf grass or native grass species. Certain areas with passive use turf can be seen as a benefit to the general public for the sake of maintaining open space. Well managed open spaces using natives or low-water use turf grasses should be acceptable.
 - **ITP Member:** The Model Water Efficiency Landscape Ordinance (MWELo) has recognized a distinction between functional and active turf versus ornamental turf.

C. SECTION 4 – Voluntary Turf Replacement

- **Jack Karlin**, TWCA: The implied intent of the ITP is to create market transformation to move away from water intensive landscapes. The funding of a *landscape conversion* program rather than a *turf replacement* program is supported, and the title of this recommendation section should be revised accordingly. This would allow for plant choices based on MWELo.
 - **ITP Member:** Do you envision installation of certain turf types as eligible?

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- **Mr. Karlin:** Yes, TWCA has some turf grasses that could be eligible. To clarify, TWCA is not in support of installing grasses that have been the conventional species over the last 40-50 years. Turf varieties that use significantly less water have been bred and installed properly in the last several years. TWCA will provide information on its testing and certification program, and peer-review process, in its written comments. TWCA was established in 2010 and is currently pursuing an accreditation. It aspires to soon be a WaterSense partner.
 - **ITP Member:** If the recommendation were drawn as a tax credit just for the commercial sector, do you still think it would be worth while?
- **Mr. Karlin:** The recommendation would still be viable, however if the program were revised to landscape conversion, it may not be necessary to single out commercial sector.
- **Paul Herzog, Surfrider Foundation:** It is recommended that the reference “where possible” in the last bullet on page 9 be re-drafted to require alignment with MWELo requirements. On-site stormwater capture should be conducted everywhere except where local agencies deem it infeasible. Assembly Bill (AB) 2525 and Senate Bill (SB) 1294 were referenced to demonstrate that the State is already moving in this direction of stormwater capture and the watershed approach. Mr. Herzog is not in support of re-drafting this recommendation to only address the commercial sector. The amount of single family homes in California is vast; these recommendations should be about incentivizing shifts to the new normal.
- **Pamela Berstler, G3:** Ms. Berstler concurred with and reiterated Mr. Herzog’s statements. This recommendation should focus on *landscape conversion* using the watershed approach to landscaping. Stormwater capture should be included in any tax incentive or rebate program. Furthermore, Ms. Berstler does not believe re-drafting the recommendation to address the commercial sector only is the right approach, since the residential sector is driving the market for change.
- **Pam Pavela, WMWD:** WMWD had a popular turf replacement program wherein \$3million was distributed for 436 programs. This effort resulted in 6.5% water reduction. This percentage was determined by analyzing 57 single family resident early adopters’ efforts and normalizing the data. WMWD paid \$2/ square foot for turf replacement. This program cost \$2,102 per AF to implement, not including staff time. It was also challenging to measure the percentage of turf that was replaced on any given landscape. Other community members were also saving water because of drought messaging. If the State is going to consider funding for LWUE it should be directed to watershed approach programs, researching new turf grass types, and assisting agencies with implementing water budget rates.
 - **ITP Member:** If these are one-time costs for the agency, assuming the turf replacement is a permanent change, the cost is not exorbitant.
 - **ITP Member:** What is your current cost of water?

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- **Ms. Pavela:** As WMWD is primarily imported water, the cost is approximately \$1,000 AF for treated water.
 - **ITP Member:** To clarify, this is a proposed tax credit, not a rebate program. If the recommendation were drawn as a tax credit just for the commercial sector, do you still think it would be worth while?
- **Ms. Pavela:** Yes, it would be worth considering. Residential landscape redesign is usually unattractive. However commercial turf replacement usually employs a designer. Mr. Herzog’s suggestion of including stormwater capture as part of the program is also worth considering.
- **Joseph Gallegos, Aquifer Pipe:** Overall, this program would bring good awareness to the issue. The overall goal should be to save potable water. A stand alone tax credit for commercial businesses is worth considering, though this program would also benefit single family residences.
- **Joe Berg, MWDOC:** Mr. Berg has reservations about the expense of this program, though still believes it should include both residential and commercial properties. The State could improve upon design assistance resources through the Save Our Water campaign.
- **Amelia Lima, Association of Professional Landscape Designers (APLD):** A tax credit program should include design services. If the public does not have good and accessible examples of attractive landscapes, they will be reticent to make landscape conversion. This is especially important for landscapes over one acre. APLD has submitted written comments, including a website link with photograph examples of waterwise landscapes.

D. SECTION 5-1 – Single-Family Residential Properties

- **Joseph Gallegos, Aquifer Pipe:** It is suggested to add a section on sprinklers that have anti-geyser shut-offs of pool zone flows. These suggestions will be submitted in writing.
- **Rich Covert, Sprinkler Pros:** The ITP is to be commended for this recommendation. An inspector can play a key role in bringing awareness to properly functioning irrigation systems. Homeowners and homebuyers should have this completed before purchase. More details to the inspection requirements could be added. For example, inspectors could check to ensure functioning clock on controllers, are there immediate leaks visible, etc.
- **Pamela Berstler, G3:** This recommendation should include a statement acknowledging that WaterSense certified irrigation system auditors are able to provide written evaluations and options for improving these landscape irrigation systems. On page 11, some items listed should be mandatory fix-on-home-sale, such as leaky valves and leaky

pressurized main lines. Pressure regulation should be added as a requirement. Section (b) on page 11 should apply to *all* landscapes.

- **Paul Herzog**, Surfrider Foundation: Mr. Herzog concurs that page 11, item (b) should apply all landscape inspections. The purpose statement of this recommendation should include an evaluation of the watershed approach, if that is in fact the ITP’s intent. An inspector could conduct a holistic evaluation of the site and identify watershed water-savings potential actions (e.g. harvesting rainwater from roofs for use on landscapes). The costs for conducting inspections should be the responsibility of the water supplier as the subsequently implemented actions would help them meet their Municipal Separate Storm Sewer System (MS4) requirements.

E. SECTION 5-2 – Landscapes Over One Acre

- **Pam Pavela**, WMWD: If a water agency has individualized water budget rates for customers they should be exempt from this recommendation. WMWD does not want to burden customers with additional reporting. If a waiver was included in this recommendation, WMWD could support it. If this recommendation is imposed, it should be clarified what the State would do with the data collected from the landscape irrigation reports, and what the penalties would be for non-compliance. Also, the timeframe for implementation should be extended.
 - **ITP Member:** What is your landscape budget?
- **Ms. Pavela:** Older customers have a landscape budget of 0.8 ETAF, and any customer since 2014 is 0.7 ETAF. WMWD knows the landscape area of every customer, and used public records to obtain this information. Alternatively, aerial imaging or Lidar surveying technology could be used to obtain landscaped area. It is imperative to be able to identify the customers that fall under the recommendation’s requirement.
 - **ITP Member:** This recommendation is a process to establish water budgets without having to put the onus entirely on the local agency.
- **Ms. Pavela:** In theory, this recommendation is a good idea. However as currently written it is more of reporting hindrance. It needs more authority.
- **JoEllen Jacoby**, City of San Diego: Ms. Jacoby echoed many of Ms. Pavela’s comments, especially the concerns about how to enforce this requirement, and noted that it would be challenging for the City of San Diego to identify applicable customers and notify them of new regulations in a timely fashion. It is recommended to extend the time period for this recommendation. Some further details of this recommendation should be clarified, e.g. the number of times notification must be provided to the customer, and does the water agency need to offer large scale commercial audits, etc. Written suggestions will be provided.
 - **ITP Member:** As the City already conducts outreach to landscape contractors and has working relationships with many, perhaps they can provide information on

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large landscapes and contribute to the collaborative process this recommendation is supporting.

- **Ms. Jacoby:** There may be liability issues with the City asking for contractors to report on landscape size. It would be necessary to consult with attorneys before proceeding with such a request. The City has some capabilities to evaluate irrigated area from aerial imaging, but has problems with accuracy.
- **Joe Berg, MWDOC:** The reason for this type of data collection should be better defined in the purpose statement. It should be clarified what DWR would do with the data once collected. For water agencies to collect this data would require a huge exercise. Most of MWDOC's customers enrolled in their voluntary WaterSmart Landscape Program have meters if their irrigated area is over an acre. These meters generate monthly irrigation reports, which are effective for issuing budget-based tiered rates. MWDOC queries these monthly reports to see what accounts have gone over budget and conduct outreach accordingly. It is requested that those enrolled in this program receive an exemption to this recommendation. The State should assist with collecting aerial imaging of landscapes as a first step for implementing this recommendation. One additional consideration is that it is difficult to maintain accurate contact information with frequent staff changes. Mr. Berg will submit written comments on this recommendation.
- **Richard Harris, East Bay Municipal Utility District (EBMUD):** This recommendation will require a significant workload in order to assess the number of properties this would apply to. There are also concerns on the quality, accuracy, use and verification of the data collected, and on the loop of accountability. The recommendations from previous commenters on utilizing aerial imaging are good ones. Additionally, the use of a third party for collection of landscape information is supported. Perhaps a pilot program can be instituted before this recommendation is incorporated into MWEL0. More detailed written comments will be provided by Mr. Harris.
 - **ITP Member:** Please elaborate on your water budget data base reporting.
- **Mr. Harris:** EBMUD landscape water budget program was established in the the late 1990s, and was recently modified. There is still a large educational component required to ensuring property owners truly understand plant type, climate impacts, etc. as related to water budgets. While parcel data can be obtained from the County as it is collected for property tax purposes, it is not always the easiest to acquire.
- **Pamela Berstler, G3:** The ITP is applauded for addressing existing landscapes in the overall goal of ultimate landscape management. Setting of clear objectives and standards is critical for achieving results. The comparison made to smog checks is an appropriate one. Ownership and stewardship of a landscape is as important as that of a car. In the State of California, there are hundreds of professionals that are qualified to provide the services outlined in this recommendation.

- **Paul Herzog**, Surfrider Foundation: This recommendation identifies a report be submitted on irrigation, but what should be required is a report on the watershed approach, including integration with the stormwater master plan and stormwater capture potential. Stormwater agencies will soon be looking at parcel fees and assessing a parcel based on its pervious surface area. Furthermore, this recommendation should apply to all landscapes, not just those over one acre. If it is limited, then the recommendation misses the predominant water users in the State.

F. SECTION 5-3 – State Owned Facilities

- **Jack Karlin**, TWCA: The ITP is to be commended for their leadership approach in this recommendation, as well as their recommendation for giving preference to the most qualified vendor versus the lowest bidding vendor. The ITP is asked to consider the allowance of drought-tolerant turf grass in demonstration gardens that are landscaped for the public benefit.
- **Paul Herzog**, Surfrider Foundation: Page 16, item 4, should require rainwater and/or stormwater capture anywhere feasible, not only where site conditions permit.
- **Pamela Berstler**, G3: G3 would like to see a watershed approach inspection be included in the recommendation on page 16-17. What has been found in California that every landscaped site can retain the first 1” of rain. The way to achieve the 50% reduction in statewide landscape water use is to fully implement MWELo and implement a 1” rainwater retention requirement for all landscapes.
- **Amelia Lima**, APLD: This recommendation should call out the curtailing of invasive plant material.
- **Pam Pavela**, WMWD: Regarding recommendation #6 on page 17, this may be against the law unless it is written in to the technical criteria.

G. SECTION 6-1 – MWELo Future Revisions

- **Paul Herzog**, Surfrider Foundation: On the topic of Applicability: The recommended threshold is too large. It should be lowered to something similar in size to a room addition, such as 100 square feet.
- **Jeff Jenson**, Golf Course Superintendents Association of America: On the topic of Evapotranspiration Adjustment Factor (ETAF) for Special Landscaped Areas (SLA): Our golf courses experience a high level of pedestrian traffic, requiring a higher level of irrigation in order to maintain the turf. It is requested that golf courses be allowed to maintain operations at an ETAF of 1.0. On the topic of Turf Grass Slope: Slopes on golf courses are integral to playability. Some slopes are greater than 10% and up to 25%.

Safe mowing is not a concern at 25% slope' mowers can safely operate up to a 33% slope. Additionally, with the use of smart controllers it is very possible to irrigate without generating any runoff. It is requested that golf courses be allowed to maintain slopes up the 25%. Golf courses are always seeking to increase their water use efficiencies for cost savings purposes. They support research on drought tolerant grasses being conducted by the US Golf Association.

- **ITP Member:** In your written comments, if possible, please provide a more detailed review of the lowest ETAF that is necessary to maintain golf course operating standards. Perhaps it is 0.9, instead of 1.0.
 - **ITP Member:** Other high-traffic SLAs will likely have similar ETAF concerns, such as soccer and football fields.
- **Craig Kessler**, Southern California Golf Association: On the topic of ETAF for SLA: In the last decade, improvements in technology have allowed some golf courses to move from a 1.0 to a 0.8 ETAF. Los Angeles has at least five years of records on water use for 35 golf courses. On average, irrigation ETAF has been 0.77. This has been pioneered as a best proactive, and the golf industry is working diligently to get in front of the 2020 goals. Given the current drought emergency, some courses have different conservation mandates imposed by their Regional Water Boards than others, and some have even closed because of extreme water reduction. The ITP should please be cautious with their recommendations to not inadvertently force more courses to shut down. On the topic of Turf Grass Slope: Mr. Kessler is in concurrence with Mr. Jenson's comments. Furthermore, slopes are actually utilized as water management techniques to prevent torrents of water from entering storm drains. Additional comments will be provided in written form.
 - **ITP Member:** What water sources do your members typically use to irrigate?
- **Mr. Kessler:** 33% of our membership irrigates with recycled water, 6-7% irrigate with non-potable water, and 59% still use potable water (which includes well water). Percentages are based on the number of courses, not on landscape area. Satellite recycling of water is on the horizon. In the long term, it should not be possible to irrigate golf courses with drinking water.
- **Joseph Gallegos**, Aquifer Pipe: On the topic of ETAF for SLA: This value should be revised to 0.7 for sprinklers and 0.8 for drip irrigation and other subsurface irrigation methods. Furthermore, it is suggested that innovative irrigation technology be included in this table of recommendation, such as the use of root feeders and hydro-tension feeders.
- **Pam Pavela**, WMWD: On the topic of ETAF for SLA: It is recommended the ETAF remain at 1.0 for golf courses. Golf courses are some of the most efficiently irrigated areas in the State. They are functional spaces, and support a \$18 billion industry critical to the State's economy. They use a fraction of 1% of the State's water supply, and should be preserved.

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- **Chris Roesink**, Hunter Industries: On the topic of Efficiency Standards: It is recommended to add a statement these standards meet *or exceed* industry standards in order to encourage innovation to even higher levels of performance.
- **Amelia Lima**, APLD: Regarding the Public Education component of this recommendation, the language should be revised to such that it does not imply landscape designers are licensed. While landscape designers should be allowed to conduct this work, they are not licensed in the state of California.

H. SECTION 6-2 – MWELo: Aligning with CALGreen Title 24 Revision Process

- **Jack Karlin**, TWCA: TWCA supports the ITP's efforts to unify and simplify the codes. Greater alignment distributes the burden of enforcing such codes. However, the ITP should consider requiring updates to MWELo on a six-year cycle rather than a three-year cycle. This would still align with the CALGreen Title 24 process. Any revisions should be supported by verifiable data.

I. SECTION 6-3 – State Facility Leadership for New Landscapes

- **Pam Pavela**, WMWD: Page 27, the last sentence of the Purpose Statement: SLAs should be exempt from this requirement. They should have a full water budget, and state agencies that own SLAs should be allowed to irrigate per the landscape's needs. Page 28, item 6D: It is suggested to revise the wording to allow for waiving the low bid requirements while also eliminating bids that do not meet qualifications.
- **Paul Herzog**, Surfrider Foundation: Page 27, Item 1: It seems redundant to pursue this tact and not a good use of funds. Some existing stormwater programs are not as foundational as they should be for building healthy living soil. One example of a function program that could be referenced is the San Diego County Water Authority program. While it is a local program, it could be applied everywhere.
 - **ITP Member**: To clarify, this recommendation is for a State program. It is focused on setting up a framework, and is primarily directed to CalTrans. Mr. Herzog is encouraged to submit written suggestions for language changes to this proposal.
- **Jack Karlin**, TWCA: The ITP is encouraged to remove the recommendation that targets the option for LEED standards in item 6B, because these standards are not as stringent as those in the current CALGreen Building Code. On Item 6D, it is recommended to strike this entire item.
 - **ITP Member**: One interpretation of this recommendation is that the other 50% of new facilities would be subject to MWELo, so this can be seen as an interim step. The authoring team can look at the wording of this recommendation to minimize misinterpretations.

- **Jon Wreschinsky:** There are concerns about limiting the establishment period of certain plant species to two years. Certain trees, especially, may need longer to establish themselves. Mr. Wreschinsky is also in agreement that the reference to LEED is duplicative, and the MWELo requirements are in fact more stringent.

J. SECTION 7-1A – Product Standards for Irrigation Equipment – Controllers

- **Joe Berg, MWDOC:** MWDOC is supportive of the intent to establish manufacturing standards with this recommendation. In the long run, moisture-based controllers will result in more water savings than weather-based controllers. Thus, the technology of smart timers should include both types of controllers. Regarding Item 5 on page 31, this is already a component of the WaterSense requirements and is redundant.
- **Pam Pavela, WMWD:** WMWD is in concurrence with the sentiment that soil-moisture sensor controllers should be sold in California.
 - **ITP Member:** The ITP is not aware of public test procedures for soil moisture sensors. If MWDOC or WMWD has published performance specifications they can submit to the ITP in written comments that would be most helpful.

K. SECTION 7-1B – Product Standards for Irrigation Equipment – Sprinkler Bodies

- **Pam Pavela, WMWD:** On page 34, item 1: There are questions as to what is considered a low-head drainage check valve, and what the costs will be for these new products.
- **Rich Covert, Sprinkler Pros:** The cost for a sprinkler body with a low-head drainage check valve is around \$2-3 each. A check valve can also be purchased separately for around \$1.
- **Shai Nicholas, Rain Bird Corporation:** Pressure regulation can also be achieved outside of the sprinkler bodies. Many older installed irrigation systems operate at around 80 psi, which can be reduced to ensure water does not overspray and is wasted or enters the home. The ITP may consider extending this recommendation to address existing homes, as MWELo does a decent job of addressing new construction. Pressure regulators are very inexpensive and easy to install. Perhaps tax credits can be applied to installation of pressure regulators in addition to turf replacement. Rain Bird Corporation has no opposition to the adoption of efficiency standards.
- **Joseph Gallegos, Aquifer Pipe:** Recommendation 1 on page 34 should include the installation of sprinkler risers. Risers can be sold separately from the sprinkler bodies. Some risers on today's market have pressure regulation capacity.
 - **ITP Member:** It is requested that Mr. Gallegos provide information on pressure regulating sprinkler risers to the ITP during the written public comment period.

- **Rich Covert**, Sprinkler Pros: Average sprinkler nozzles produce five times as much pressure flow per minute than nozzles with pressure regulation. Perhaps a rebate program could be increased by \$10 or another minimum amount to encourage more homeowners to make these changes.

L. SECTION 7-2 – Permit Required for Irrigation Installation

- **JoEllen Jacoby**, City of San Diego: A minimum size for non-residential landscapes should be applied to this recommendation. There are also concerns about the feasibility of enforcement of this recommendation, and how to inform property owners of new laws and requirement.
- **Pam Pavela**, WMWD: It is requested that agencies with water budget rates be exempt from this recommendation. If a person expands their landscape in the WMDW service area, they are already required to inform the District. City jurisdictions handle the permitting processes.

M. SECTION 7-4 – Connection Charges

- **Pam Pavela**, WMWD: The development of capacity charges is a local issue. The local process should not be circumvented. There is no particular section of this recommendation WMWD finds explicitly objectionable at this time, but may provide additional thoughts in written comment.
 - **ITP Member**: If WMWD customers drop down in meter size, are they issued a refund.
- **Ms. Pavela**: Unsure.
- **JoEllen Jacoby**, City of San Diego: There is general concern that a low water use landscape design may not equate to sustainable water savings, if the landscape is not maintained or is is improperly cared for.

N. SECTION 7-5 – Plant Labeling

- **Jack Karlin**, TWCA: TWCA strongly supports mandatory plant labeling. Article 7 should be expanded to include any DWR water approved plant resource. Labeling should include the plant’s water use classification (Citation 53481 Section (3) and 53482). It should further recognize that the Water Use Classification of Landscape Species (WUCOLS) may not always be the only appropriate resource available.
- **Amelia Lima**, APLD: APLD is concerned that requiring individual plant labeling will result in copious amounts of plastic trash in the form of “plant flags” that very frequently litter and blow off the development site. If required, individual labels should be stuck to the

pots. Furthermore, whoever comes to conduct the installation inspection should have basic plant material knowledge.

- **Pamela Berstler, G3:** G3 agrees that plant labeling should be attached to the pots, or small stickers applied to a printed design schematic of the landscape for the inspector's reference. Plant flags littering landscape sites are a huge pollution problem, and that should not inadvertently be made worse. Furthermore, inspectors should be required to have basic plant knowledge.

O. SECTION 7-7 – CIMIS Upgrades

- **Joe Berg, MWDOC:** MWDOC has recently developed a California Sprinkler Adjustment Notification System to assist residents and professionals in adjusting their irrigation schedules per climatic conditions, etc. Weekly notifications are sent out to those persons who have voluntarily enrolled via email. Recommended percent adjustments for their smart controllers are automatically generated. Additional supplemental email messaging can be customized (e.g. "rain is coming, turn off your sprinklers" or "new rebate program available"). The program targets both single family residents and commercial/industrial properties. Two other agencies will be adopting this program soon. The ultimate intent is for DWR to take over the system and implement it statewide. The ITP should include the expansion of CIMIS to envelop this program. Please visit www.csans.net for more information.
- **Pam Pavela, WMWD:** What MWDOC has developed is perfect for replacing irrigation that has been depleted. However optimum plant health requires that the soil dry entirely from time to time; a soil moisture depletion factor.
 - **Mr. Berg:** The system uses information that is already embedded in the individual smart controllers. For example, if a homeowner tells the system only to water every Monday and Thursday, that is what it will do.

P. SECTION 8-1 – Certification of Professionals

- **Amelia Lima, APLD:** The analogy of an electrician used in this recommendation is not appropriate, because in the State electricians are licensed and landscape designers are not. There are some other State programs that have an equivalent requirement to the landscape designer's certificate that could be referenced. Additionally, APLD does require a number of continuing education units (CEUs) every three years. Landscape designers are permitted to conduct residential landscape design, including plant selection, and in doing so should be able to complete all of the required MWELo calculations.
 - **DWR Staff:** It is believed that no water budget calculations are performed under MWELo Appendix D. Thus, the landscape and irrigation plans can be completed by a landscape designer.

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- **ACTION ITEM:** Vicki Lake to confer with Peter Brostrom, DWR, as to if landscape designers are allowed to complete MWELo calculations and complete the package submittal to DWR. If necessary, also consult with legal team.
- **Pamela Berstler, G3:** What has frequently occurred with the revised MWELo requirements is that local jurisdictions have determined only a small group of individuals can complete and submit Appendix D calculations. San Diego is an example of this. There continues to be a muddling of certification qualifications and licensures in the State, of who is capable of creating a planting plan and calculating MAWA, etc. The ITP should look to the WaterSense certification for CEU requirements. This continuing education program is already established, and it is not necessary to reinvent a similar program. A person must maintain their CEUs on a two-year cycle in order to keep their WaterSense certification.
 - **ITP Member:** It is requested that Ms. Berstler provided specific language change recommendations to this sections in written form.
- **JoEllen Jacoby, City of San Diego:** The City supports the idea a certification program believes WaterSense is an appropriate organization to provide this.
- **Jon Wrechinsky:** This recommendation is extremely important in regard to maintaining professional qualifications. If new language is inserted into this recommendation, the opportunity to review revisions would be appreciated.
- **Pam Pavela, WMWD:** On Page 49, Item 3 or Item 6: WMWD would like to incorporate CEU tracking in either of these recommendations. It is also recommended that the ITP clarify the language so it is clear they are requiring that all staff doing the work maintain CEUs, not just the employers.
- **Sue Mossberg, Sweetwater Authority:** There needs to be some consideration to the economic impact of those employees who are already pursuing or requiring CEUs, and an accommodation of time for the transition of this requirement to take place.

Q. SECTION 8-2 – C-27 Exam Questions

The Section 8-2 authoring team provided proposed clarifying language to the recommendation portion of this proposal. Language changes were indicated in orange text. There were no comments provided by members of the public on this section.

AGREEMENT: The ITP voted unanimously to use the revised Section 8-2 language provided by the authoring team in their Final Report.

R. SECTION 9 – Public Perceptions and Social Norms

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- **Amelia Lima**, APLD: On page 52, the background statement includes a sentence that states “Often and unknowingly, homeowners...” This sentence incorrectly, and with an inflammatory tone, implies that landscape designers are operating irresponsibly. For many years, APLD has provided landscape design services to homeowners. It is recommended to strike this sentence.
- **Pamela Berstler**, G3: Ms. Berstler agrees with striking this sentence, and also suggests considering striking this entire section. It is not the role of the ITP or DWR to attempt to differentiate licensed professionals versus unlicensed professionals. Rather that is the job of the governing board. Page 53, item 1 should also require that examples of landscapes comply with the watershed approach to landscaping.

**Note: ITP member Penny Falcon left the Public Meeting at this junction due to travel constraints, and called in as a member of the public for the duration of the meeting.*

- **Paul Herzog**, Surfrider Foundation: The Surfrider Foundation has spent a great deal of effort working on public perceptions and social norms. What the community is looking for is a simple message, coupled with high quality visuals. That message is the watershed approach. Item 2G: These metrics have already been developed by the Surfrider Ocean Friendly Gardens program. Also of note, the State Board is rolling out their stormwater strategic program currently, and there is potential here for unified messaging and programmatic overlap.
- **Pamela Berstler**, G3: Note that the Environmental Protection Agency (EPA) WaterSense database is searchable by zip code.

S. SECTION 10-1 – [Title Pending]

There were no comments from members of the public on Section 10-1.

ACTION ITEM: Section 10-1 Authoring Team to determine recommendation title.

T. SECTION 10-2 – WUCOLS IV Support

- **Amelia Lima**, APLD: APLD supports this recommendation, and requests to be a contributor to the WUCOLS update process should this recommendation be adopted.

U. APPENDIX A – Section 7-8 – Water Budget Performance Reporting

- **Joe Berg**, MWDOC: Orange County applies the water budget methodology. Roughly 50% of the water used by MWDOC’s customers is applied to landscapes. Budget calculations show that customers are applying just over 2.1 feet of water per 1 acre of landscaped area. These are gross calculations from the water analysis in the Master Plan and do not

include irrigation efficiency or management. If moving forward with this recommendation, the basic question the Panel should answer is “how good is good enough?” A 50% reduction, or 1 foot of water per acre of landscape, would not produce very attractive landscaped.

- **ITP Member:** It was requested that Mr. Berg compute what the MAWA would be based on a 0.8 ET adjustment factor, the time period for these calculations be provided, and information to if these calculations include or exclude landscapes using recycled water.

5. NEXT STEPS & CLOSING REMARKS

The ITP will host an additional webinar at minimum 10 days from Monday March 7th, to continue discussing the ITP Final Report Supporting Sections and how to address/incorporate public comment received.

ACTION ITEM: CCP to work with ITP and DWR to schedule an ITP webinar as soon as possible, no earlier than March 17th.

- **UPDATE:** The ITP Webinar has been scheduled for March 30th from 12:00 – 3:00 pm.

CCP, DWR and all members of the ITP expressed their sincere thanks to all members of the public who participated in the public meeting and took the time to provide thoughtful, substantive comments for the ITP’s consideration.

6. ATTENDANCE

ITP Members

Dave Fujino
Ed Osann
Jeff Stephenson
Lisa Maddaus
Penny Falcon
Peter Estournes
William Granger

Staff

Dave Ceppos, CCP
Julie Saare-Edmonds, DWR
Meagan Wylie, CCP
Vicki Lake, DWR

Public

In Person

Amelia Lima
Cathy Peroni
Chris Roeskin
Craig Kestler
Gus Meza
Jack Karlin
Jeff Jensen
Joe Berg
JoEllen Jacoby
Joseph Gallegos
Pam Pavela
Pamela Berstler
Paul Herzog
Rich Covert
Shai Nicholas

On Phone

Cody Thomas
Eric Santos
Gary Collins
Jon Wreschinsky
Julie Escomia
Maureen Decombe
Ron Wolfarth
Sue Mossberg