

**Santa Clara Valley Water District**

**2017 Landscape Summit**

**Event Report**

**Thursday, April 20, 2017**

**8:30 a.m – 2:00 p.m.**

**Cupertino Community Hall**

**Hosted by Santa Clara Valley Water District**



**Report prepared by**

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## Event Summary

On April 20, 2017, eighty-five landscape professionals and staff from Santa Clara Valley Water District (District) and local retailers came together for a brainstorming session on implementing conservation as a lifestyle through efficient landscape practices.

The District facilitated its second landscape summit at Cupertino Community Hall. The five-hour session consisted of a status of current water supply conditions in the state and Santa Clara County; four case studies of exemplary conservation achievements in residential and commercial landscape, innovative water management, and graywater and rainwater harvesting; and group breakout sessions and action planning.



After hearing the case study presentations, which included representatives from Cinnabar Hills Golf Club, Bay Maples, Wild California Gardens, BrightView Landscape Services and landscape architect Stephanie Morris, District staff guided summit participants in small groups to brainstorm innovative ways and resources needed to improve landscape management and irrigation practices.

Participants felt invigorated by the presentations and breakout sessions. There was strong interest in collaboration between designers, contractors and front-line maintenance workers; expanding public education and awareness with demonstration water-wise gardens, and developing guidelines to increase conservation. The District is committed to working with local landscape industry professionals toward these efforts.

The results of the working groups showed general consensus that water conservation should be a continuous way of life, regardless of current weather conditions. Groups also discussed that many people shifted behaviors during the drought, and that education is needed to prevent previous behaviors from returning. There was a strong desire to promote better management practices through enhanced guidelines and training, as well as to develop systems, methods, and tools to support collaboration, communication, and follow-up between all parties responsible for implementing and maintaining a landscape. Landscape professionals and the District expressed interest in working together to produce tools to develop sustainable guidelines, as well as conduct outreach including demonstration gardens, seminars, trainings and media aids for the public and professionals. The District will also provide public and professional outreach and education.

A post-event survey revealed that all aspects of the Landscape Summit were enjoyed, and the case studies were particularly favored. All post-event survey respondents found value in the event, and felt another one should be offered.

With case studies demonstrating real-world applications backed by water savings data, sessions for innovating new ways to collectively create sustainable landscapes, and interaction between government and business experts, the second Landscape Summit was an informative and enjoyable event.

## Event Description and Format

The Landscape Summit was hosted by the Santa Clara Valley Water District and its Landscape Committee as a forum for dialogue to catalyze collaborative efforts between the District and the landscape industry to save water and help maintain healthy water supplies. Eighty-five members of the landscape industry, including staff from the District and local water retailers, convened at the Cupertino Community Hall on Thursday, April 20, 2017, to take part in this event. In April 2017, California's Governor Brown declared the end of a five-year drought, and also stressed the importance of maintaining conservation as a way of life to support water supplies and withstand future droughts. The landscape industry has a significant role to play in this effort through sustainable landscape implementation, as landscape water use accounts for a significant portion of urban water use.

Participants heard presentations from professional landscape experts about water conservation case studies highlighting successful residential and commercial conservation strategies and projects. In addition, vendors representing various landscape-related businesses were on-site to showcase technologies and products to help conserve water. This summit was the second of its kind, and was hosted again this year based on popular demand, as all respondents from last year's post-summit survey felt that another Landscape Summit should be offered.

Landscape professionals and industry experts enthusiastically responded to the summit invitation. The event opened with a vendor fair with representatives from industries representing the irrigation (WaterSavers, Hunter, Rainbird), permeable hardscape (Pacific Interlock Pavers, Pervious Products) and the non-profit sector (Our City Forest). District Director Richard P. Santos provided an enthusiastic welcome. Ashley Carter, Water Conservation Specialist at the District, discussed the state's and county's current water supply picture and recovery from the past five-year drought. She also discussed the various steps the District has taken based on the participant feedback from last year's Summit.



Anthony Eulo, Environmental Program Administrator for the city of Morgan Hill, moderated a presentation of case studies featuring several examples of landscapes that made commendable changes to effectively conserve water. Landscape Architect Stephanie Morris discussed a residential landscape project featuring a native landscape. Victor Cruz & Tony Fagnoli from



BrightView Landscape Services discussed large-scale landscape and equipment conversion projects at the Silver Creek Valley Country Club. Brian Boyer, Golf Course Superintendent, discussed a large-scale landscape conversion at the Cinnabar Hills Golf Club, as well as innovative landscape management practices. Alan Hackler of Bay Maples discussed graywater and rainwater projects at Wild California Gardens. Each of the talks revealed practices that led to significant and measurable water savings, and provided practical knowledge that the audience could take away and apply. Each talk also presented

water consumption data in order to demonstrate water savings, as well as financial costs and returns on investment. Project benefits included financial savings as well as non-monetary benefits such as water conservation, aesthetics, and habitat. Talks were followed by thoughtful questions from the audience. The event also offered lunch and a drawing for prizes provided by vendors.

Based on positive feedback from last year's Summit, working group sessions were held again to generate ideas, propel plans for action, and directly provide feedback to the District. Groups consisted of representatives from each of the landscape industry affiliations present at the Summit. These working groups provided participants the opportunity to put heads together on ways to collaboratively facilitate the landscape industry's efforts towards sustainable landscape design. Questions were posed regarding lessons from the past drought, challenges moving forward, and ideas to solve them. Facilitators recorded the groups' responses, which were synthesized in a final action planning session.

The event was well-received, and the case studies received a great deal of positive feedback. One participant commented that "The case studies were particularly spectacular. Very well done." All post-event survey respondents felt the Summit was valuable, and welcomed the idea of similar summits in the future. Participants commented that "This event is the best I've attended that brings every type of professional in the landscape industry together for brainstorming" and "Great information exchange and networking."

### **Working Groups**

Working groups at the Landscape Summit were developed to provide the landscape industry an opportunity to discuss water supply and conservation challenges they faced, ideas for solutions, and potential ways that the District may assist. During last year's summit, working groups were established such that each group consisted of participants from a single professional background. This year, groups were established to provide representation from each of the following professional backgrounds: contractors and realtors, landscape designers/architects, landscape maintenance contractors, master gardeners and parks, nurseries, and other miscellaneous participants. The goal of this new format was to ensure communication between various types of professionals and to encourage a collaborative approach towards conservation. Each group addressed the following questions:



1. What is one lesson we all learned in response to the drought?
2. While most people agree that it is possible to design and construct attractive landscapes that use water very efficiently, many new landscapes wind up being installed that aren't very efficient. What can the landscape industry collectively do to ensure that new landscapes installed in Santa Clara County support long term water conservation?

3. Irrigation specifically seems to remain the most challenging aspect of getting new landscapes installed that will be efficient over the long run. How can we all work better together in the areas of irrigation design, installation, and maintenance to support long term water efficiency?

4. The District and local water retailers typically engage in broad public education campaigns to support water conservation. How can the landscape industry engage and partner with the District to better educate your clients about the need to invest in water efficiency?

### Responses to Questions Posed to Working Groups

Each group, organized by “tables,” provided responses to questions, which were recorded by group facilitators on flip charts. Each table’s responses were directly transcribed from the flip charts and are shown below. Each group was required to select the top response for each question. Top responses are underlined. The overall responses were gathered during a final session when groups reported their findings, which were synthesized.

#### 1. What is one lesson we all learned in response to the drought?

**Overall response:** Groups generally felt that water conservation should be a continuous way of life, regardless of current weather conditions. Groups also discussed that many people shifted behaviors during the drought, and that better education is needed to prevent previous behaviors from returning and to promote continued conservation.



#### Table 1:

- a. Water conservation should be a lifestyle, not just during the drought.
- b. Rebates are a big incentive for customers.
- c. People are surprisingly ready to change their perspective on water conservation.
- d. No rain equals a drought. Rain equals no drought.
- e. Lawn is part of the expected culture when it comes to homes.
- f. Lawns are perceived to be cheaper and easier, which is an education challenge.
- g. Maintenance staff for plant landscapes requires high expertise.

#### Table 2:

- a. People will see the change in landscaping
  - Change is necessary to develop a sustainable economy
  - As more designs and technology are created and become more efficient, this will appeal to people
- b. Many residents didn’t care about the drought
- c. Lawns are dumb and conserving water is a long-term issue.

**Table 3:**

- a. Better planning and maintenance is needed.

**Table 4:**

- a. Education is important.
  - We need to have a mindset of continued drought and conservation.
- d. Trees are still important.
- e. Landscapes can be beautiful and lush without a lawn.
- f. Irrigation design considerations are extremely important.

**Table 5:**

- a. Customers don't understand "drought tolerant."
- b. All or nothing. People just shut off irrigation instead of cutting back.
- c. Customers don't know how to irrigate trees without lawn irrigation.
- d. People learned to be okay with brown/less green landscape.
- e. During the mandatory 30% call for conservation, people reduced water use. Afterwards, customers immediately went back to old ways.
- f. Need to switch focus from drought response to conservation as a "way of life."
- g. People don't know how to respond to drought without letting everything die. All or nothing.

**Table 6:**

- a. Sell conservation made easier.
  - Larger rebate helps.
- b. Drought equals temporary.
  - We can work together when needed: vendor, contractor, and owner.
- c. Conservation is doable but it is expensive.
  - Use water wisely
- d. "Decorative" turf is not an appropriate for California homes.
- e. Make it easier for younger generations to understand the drought and what they can do to survive through it.

**Table 7:**

- a. Cost of logistics of tree replacement vs. water use.
- b. Realizing value of landscapes.
- c. Retrofit to keep trees alive.
- d. Education on water efficiency specifics.
- e. Maintenance should be more fluid.

- f. Water to a budget, not a schedule.
- g. With education, there's a solution.
- h. Educate to water to a budget, to preserve valuable assets.

**Table 8:**

- a. People learned they can conserve.
- b. Client education.
- c. Support Water Wise House Calls.
- d. Understanding usage.
- e. Understanding where water comes from.
- f. Water is cheap.
- g. Need to change mindset, way of life.
- h. Need for creative and technological solutions.

2. While most people agree that it is possible to design and construct attractive landscapes that use water very efficiently, many new landscapes wind up being installed that aren't very efficient. **What can the landscape industry collectively do to ensure that new landscapes installed in Santa Clara County support long term water conservation?**

**Overall response:** Need to promote better management practices through better guidelines and training. Collaboration, communication, and follow-up between all parties is needed when implementing a landscape, such as between designers, contractors, and maintenance staff. Need better tools to help this happen.

**Table 1:**

- a. More teamwork for get people into changing their perspective on lawns.
- b. Communication between designers and maintenance staff.
- c. More demonstration sites and more advertising.
- d. Make efficient landscapes that won't be penalized in the next drought.

**Table 2:**

- a. Have the correct plant choice with the correct mulch.
- b. Have the appropriate irrigation types.
  - Move the point-emitters away from the root ball establishment.
  - Install multiple rings to shut off portions of the drip system.
  - Introduce people to plant selection based on their microclimate at specific nurseries.

**Table 3:**

- a. Improve training for front line maintenance people.
- b. Accountability.
- c. Better irrigation documentation.

**Table 4:**

- a. Promote the water rebates.
  - Educate about long term maintenance.
  - Educate about deep, infrequent water practices and hydro-zoning.
- b. Too much hardscape leads to “heat island” effect nurseries code plants/group by water needs.
- c. Garden tours show mature plant specimens.
- d. Cities need to ensure new landscapes are installed as requirements.

**Table 5:**

- a. Guidelines need common standard BMP’s.
- b. Last contact with designer is when design is passed off to customer.
  - No further supervision and communication occurs.
- c. Designers are limited in what they can design.
- d. Need more workshops to educate contractors. Set in old ways. Need to learn about new techniques.
- e. All the components are overwhelming.
- f. Utilize irrigation suppliers to get education.
- g. Training in multiple languages.
- h. Build designer and contractor relationships.
- i. Designers need to get more active in the design of irrigation.
- j. Specify installation establishment period. (Contractors don’t know plants.)
- k. Include a step in the design that mandates meeting with contractors.

**Table 6:**

- a. Rating systems are needed.
  - LEEDs
  - Bay-Friendly
  - Sustainable sites
- b. Supporting efficiency with manufacturing products.
- c. Create an agreement to keep low-water landscape.
- d. Code of ethics for landscape contractors.



- e. Change the demand for aesthetics.
- f. Sell home only if it is conserving water.

**Table 7:**

- a. Hydrozoning-education.
- b. Integrate planting and irrigation systems to maximize efficiency.
- c. Specific education for clients and ourselves.
  - Hydrozone
  - Irrigation
  - How plants need water
    - Summer dormant CA native vs. Mediterranean.
    - Shallow rooted.
- d. Efficiency vs. aesthetics
- e. Water to a budget, not a schedule
- f. Educate to more detailed hydrozoning, to make efficient watering to a budget possible.

**Table 8:**

- a. Require landscape audits at installation.
  - b. Monthly review of controller settings.
  - c. Legislation for all new developments need enforcement.
  - d. Smart water management.
  - e. Education
    - Plant material
    - Hydrozoning
3. Irrigation specifically seems to remain the most challenging aspect of getting new landscapes installed that will be efficient over the long run. **How can we all work better together in the areas of irrigation design, installation, and maintenance to support long term water efficiency?**

**Overall response:** Create systems, methods, and/or training that will enable communication between all parties responsible for implementing and maintaining a landscape that remains low water use.

**Table 1:**

- a. Post occupancy evaluations and tracking.
- b. Publish standards/goals for irrigation (e.g. gold star system, credit for system audits).
- c. Continue education for the public and contractors.

- d. Require irrigation checks and maintenance.
- e. Educate the nursery staff education.
- f. Do follow up visits for contractors and designers.
- g. Demand better maintenance and develop model examples for customers.
- h. Have a hotline for technical assistance.

**Table 2:**

- i. Continue educating, hosting classes, and communicating with landscapers.
- j. Design choices, ¼" vs ½" of drip tubing, minimizing mineralization of tubing.
- k. Maintenance practices that get communicated and integrated into education programs.
- l. Tours for public education on native gardens.
- m. Show people examples of low water use landscapes.
  - Teach people not to over plant on new installations.

**Table 3:**

- a. Better collaboration and communication between all parties.

**Table 4:**

- a. Promote rainwater or recycled water.
- b. Develop a list of plants that thrive/tolerate recycled or greywater.
- c. Join organizations like "Bay Friendly" or "Rescape CA" that bridge the gap between designers, installers and maintenance.
  - Promote efficient irrigation (drip).
- d. Promote more client hands-on involvement/investment.

**Table 5:**

- a. Make irrigation design as easy to maintain as possible.
- b. Encourage smart controllers.
- c. More education for customers from the District.
- d. Designer can't design exact specifications, but can add some basic information (i.e. specify that inline drip is preferred).
- e. Contractors need to learn about new technologies.
- f. Irrigation suppliers can do more to encourage new technology.

**Table 6:**

- a. Keep information optimal and share information with other designers/clients.
- b. Maintenance is an issue.
- c. Owners may need to pay more for better expertise when it comes to maintenance.

- d. Education on the value of maintenance.
- e. Better communication between design/ construction/ maintenance.
- f. Standards
- g. Water budgets
- h. Owner’s maintenance on irrigation.

**Table 7:**

- a. Communicating intent of design through life cycle of project.
- b. More coordinating meetings.
- c. Statements of intent at maturity.
- d. More feedback beyond installation into a water saving maintenance and systems.
- e. More complex follow up on non-lawn landscapers.
- f. More coordination of design and intent among all stakeholders through entire project and beyond.

**Table 8:**

- a. Partnering with the right people.
- b. Getting the construction industry onboard.
- c. View projects “long term” continuity.
- d. Maintenance needs to be built into project.
- e. Investment/commitment for the long term.
- f. Coordination.

4. The District and local water retailers typically engage in broad public education campaigns to support water conservation. **How can the landscape industry engage and partner with the District to better educate your clients about the need to invest in water efficiency?**

**Overall response:** Landscape professionals and the District can work together to produce tools to facilitate sustainable guidelines such as watering to a budget, building healthy soil, expanding permeable hardscapes, adding trees to the plant list, as well as outreach including demonstration gardens, seminars, trainings and media aids for the public and professionals.

**Table 1:**

- a. Make people want a “Gold star”
- b. Post rebate maintenance requirements. Hold back portion of rebate.
- c. Separate “drought” from our permanent climate.
- d. Smart lawns only.
- e. Enforce laws for new landscapers.
- f. Penalize unused lawns.

**Table 2:**

- a. Having more tours of native gardens.
  - Start education early and have monthly announcements.
- b. Create more efficient landscape development from start to finish.
  - Coordinate between water and municipal planning.
- c. Help the public understand where new rules and goals are coming from.
- d. An up-to-date interface showing people how to do irrigation scheduling.
- e. Consistent water rules to help businesses understand what they need to do.
- f. Set a clear, good standard for water use and how to schedule watering in the landscape.
- g. Educate on effects of herbicide, insecticide, and pesticides.
  - Healthy soil for healthy plants.
  - How do nurseries grow plants?

**Table 3:**

- a. Messaging.
- b. Simple positive messages.
- c. Conservation is a way of life.

**Table 4:**

- a. Present various case studies.
  - Nursery seminars
  - Community outreach (i.e. Farmers Markets).
  - Links to water resources in water bills.
- b. Companies have links back to water district on their websites, community demonstration gardens.

**Table 5:**

- a. Get the word out to contractors.
  - Free lunch helps.
  - Offer multiple language seminars.
- b. Need to have hands on training.
- c. Develop guidelines/standards/ BMPs
- d. Need to include nurseries with contractors.

**Table 6:**

- a. List of contractors at the District.
- b. Basics of irrigation systems.
- c. Walk-thru video, "visual aids," irrigation manual.
- d. Billboards are effective.

- e. Educate that we have a Mediterranean climate.
- f. Coordinate with community groups.
- g. Teach kids about gardens conserving water.
- h. Importance of habitat, energy, and global warning.
- i. Return on Investment
- j. Laundry to landscape kit.
- k. Climate not a drought.

**Table 7:**

- a. Every project should demonstrate sustainable principles that include benefits beyond water efficiency.
- b. Municipalities take lead with permeable hardscape.
- c. Healthy soil is the foundation of sustainable design and efficient irrigation.
- d. Add trees to rebate list.
- e. Landscape professionals' assistance to provide education specific cost effective tools to facilitate watering to a budget.
- f. Landscape professionals partner with district to produce cost effective tools to facilitate
  - Water to a budget
  - Building healthy soil
  - Promoting expansion of rebate program to include trees.
  - Include permeable hardscaping.
  - Collaboration to share common goals between municipalities.

**Table 8:**

- a. Landscape workshops for public.
- b. Outreach
  - School programs
  - Corporations
  - Seminars (ex: BAWSCA)
- c. Stop referring to "drought."
- d. District asking for feedback.
- e. Top 100 plants- marketing
- f. Connect nursery and homeowner.



**Next steps by the District**

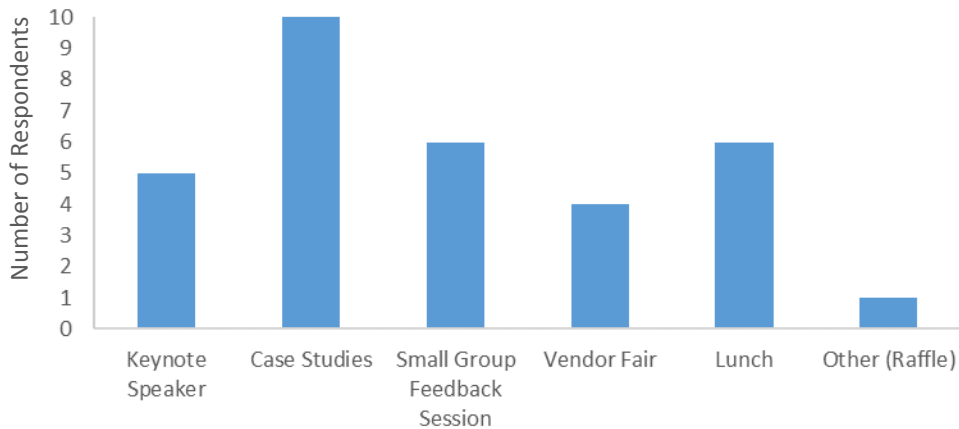
The working group sessions provided the District with a great deal of useful feedback, and the District plans to work together with the landscape industry towards the common goal of water conservation as a way of life. The District plans to act on the feedback by developing and supporting guidelines, methods, and tools to facilitate sustainable landscape practices such as appropriate watering, plant

selection, etc. This may involve creating a checklist that clients can use to select a sustainable landscaper and ensure that sustainable practices are performed throughout the process of implementation and maintenance, and to support collaboration between parties responsible for the landscape. The District will also provide public and professional outreach and education including seminars, trainings and media aids.

### Post-event survey

A post-event survey was conducted to collect participant feedback, and there were 10 respondents. In summary, all aspects of the Landscape Summit were enjoyed, and the case studies were particularly favored. All respondents felt the District should offer future Summits, and the majority felt it should be an annual event. All respondents felt the Summit should be offered in the winter or spring, with a greater proportion favoring the spring. One respondent felt late winter/early spring would be appropriate, and a commenter stated that the next event should be hosted before “things get busy in spring.” The majority of respondents felt no changes were needed for a future summit. A few suggestions were that the working groups could discuss how to apply case studies and more time to visit vendors. Many respondents provided resources (e.g. websites) that could serve as resources for the landscape industry. Post-event survey results are shown on the following pages.

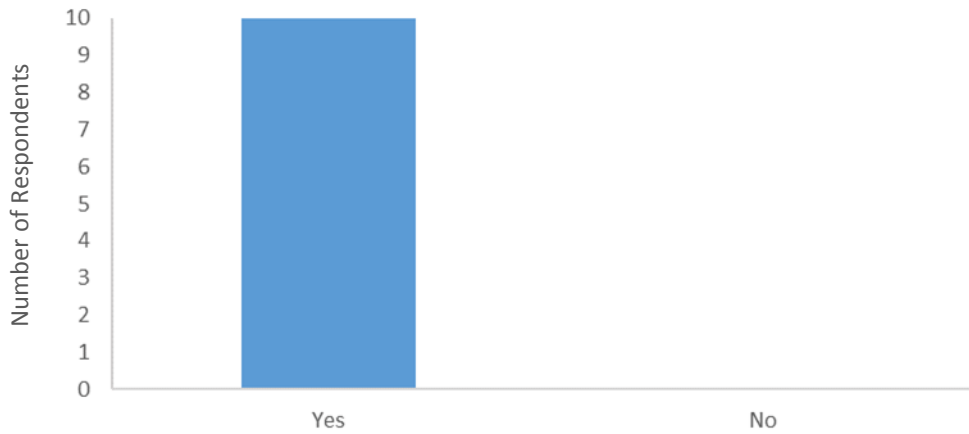
#### 1. What aspects of the Summit did you enjoy? (check all that apply)



#### Comments:

- Some say you don't win friends with salad, but I really appreciated the salad option!
- Case Studies ended up better than expected. The Golf Course was surprising.
- Great event all around.
- Good, diverse presenters for the Case Studies
- The case studies were particularly spectacular. Very well done.

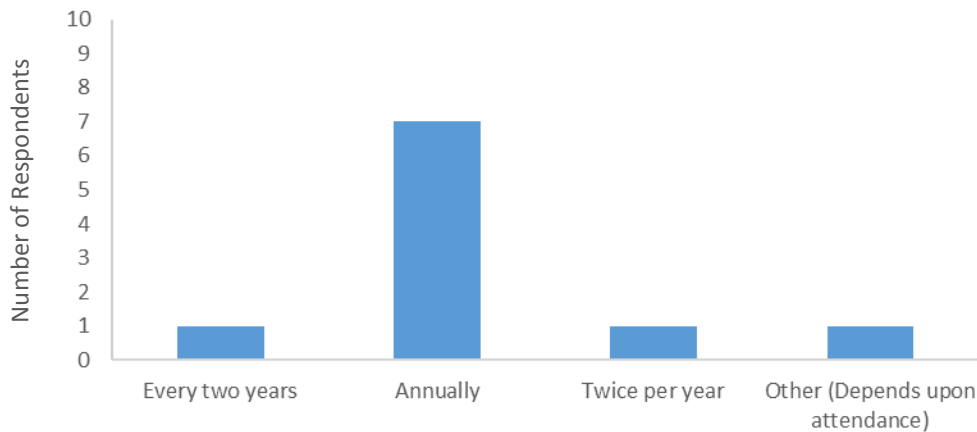
## 2. Do you think the District should offer Landscape Summits in the future?



### Comments:

- Hopefully the survey will get you other subjects.
- It's a great way to get people together to learn from each other and have communication flow between the landscape professionals and water district
- This event is the best I've attended that brings every type of professional in the landscape industry together for brainstorming.

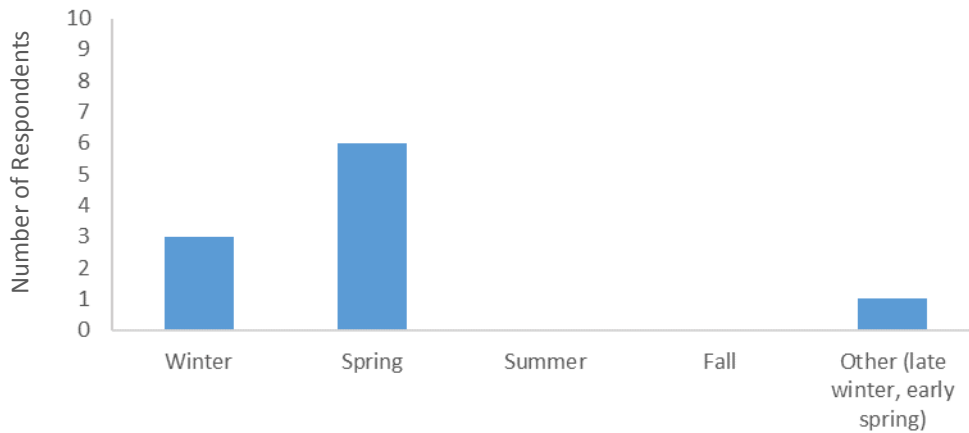
## 3. If you answered yes, how often should this workshop be held?



- I think every two years would provide time for local conditions to change, to incorporate feedback from previous summits, and to have a fresh agenda. I'm concerned an annual event would lose impact over time.

- If the same people keep coming every year, then yearly is probably too often. This event needs to draw from a broader section of the landscaping industry, including traditional maintenance and construction firms.
- If this were a training event, I would suggest doing it twice each year.

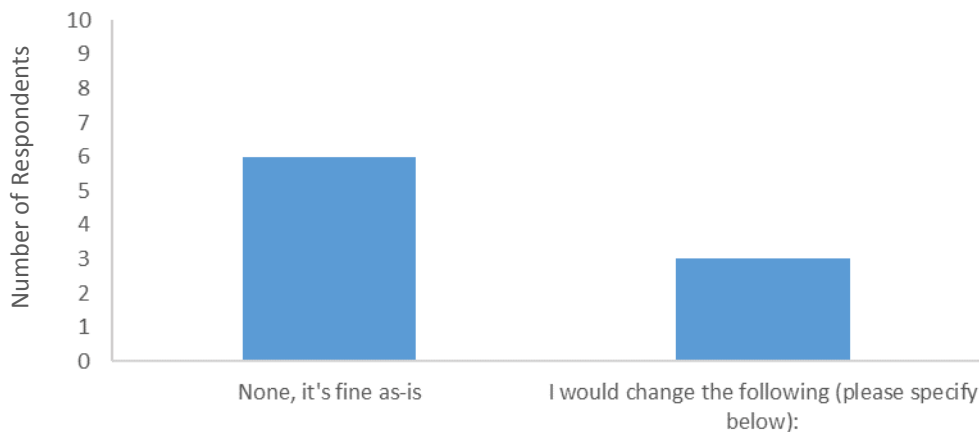
#### 4. What time of year should the workshop be held?



#### Comments:

- Early spring
- I know nursery people were not able to attend because they were busy and could not afford the missed staff.
- How about late January or in February, before things get busy in spring?
- If continued annually as a strategizing meeting, it would be helpful to meet earlier (February or early March) rather than April.

#### 5. What changes, if any, would you suggest for a future Landscape Summit?

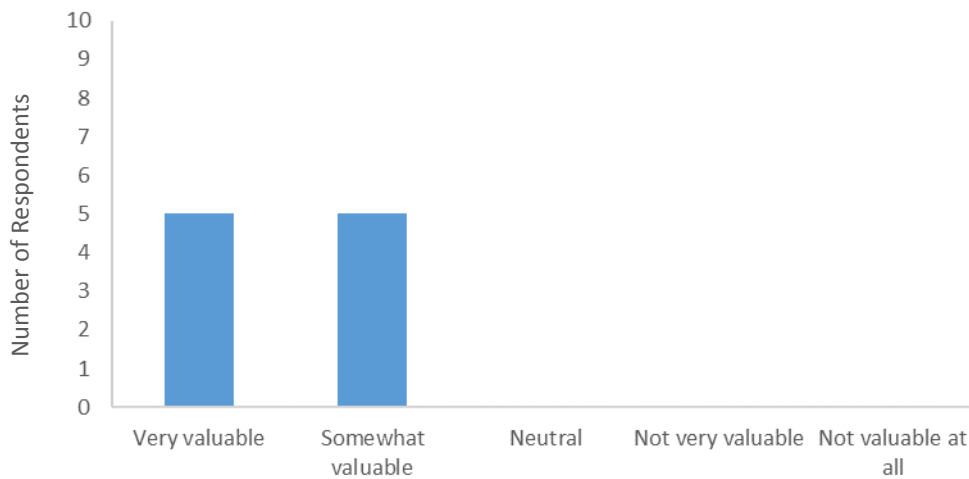




Comments:

- I preferred this framework over last years (case studies vs panelists). I think the case studies could be incorporated into the small-group discussions more, e.g. "which case study do you think you could incorporate into your business somehow, and why?"
- Larger facility
- "Addition:
  - Studies of water capture (catchment), water recycle (desalination of dirty water), application rates research (like Bob Perry's book and its implementation) but must be presented in an interesting way."
  - More time to visit vendor booths. As a working mother, I couldn't arrive until almost 9:30, leaving me only lunch time to network with other guests (no time for vendors). The poor vendors had to sit there all day long (long day with little foot traffic).
  - It's up to the vendors, but I'd like to know if it's worthwhile for them to attend. We could probably do the summit either without vendors or add more to increase the diversity of products represented.
  - I really enjoyed the addition of the case studies this year. It might be neat to add some type of hands-on mini-workshop to acquaint attendees with new irrigation equipment/techniques.

6. Overall, how valuable was this Summit to you?



Comments:

- Great opportunity for feedback and to clear the air (if needed)
- I wanted to listen to my competitions presentation.
- It's great to get the latest perspective and information from the water district. Seeing many of the same participants I see at other "sustainable" landscaping events reduces the value.
- Great information exchange and networking.

The remaining questions required individual responses.

7. What information or insight was most beneficial to you specifically?

- The case studies, and the breadth of topics they covered.
- case studies. Could not write fast enough. Will there be published presentations offered?
- Learning about gray water, sheet mulching (newer technologies). Listening to a landscape architect, Case studies on water savings
- Coordinating on irrigation practices, meeting other professionals and getting their input, seeing the case studies.
- Stephanie Morris's case study with its clear data and remarkable outcomes for converting residential lawn to a low-water landscape would change minds of those reluctant to take on that process. Would be awesome to be able to share that information with homeowners.

8. Is there anything else you'd like to share about the event? Please specify.

- Length was perfect
- Wish the speaker could have used a pointer tool
- I thought the small group was TOO long and not beneficial at all. I'd rather have visited vendor booths
- Great lunch

9. What is your job title?

- Water Conservation Specialist II
- Director
- retired nurseryman
- Business Development
- Landscape contractor
- Landscape Architect
- General Manager
- Green Goods Coordinator & Merchandiser; Landscape Designer
- President

10. How many years have you been in the landscape industry?

- About 7 years
- 6 years
- 40 plus years
- 23
- 10
- 20
- 6
- 8
- 40 years