



This meeting is not subject to Brown Act noticing requirements. The agenda is subject to change.

**Water Demand Committee Members:**  
*Andy Clarke, Chair*  
*Jeanne Byrne*  
*Molly Evans*

**Alternate:**  
*Brenda Lewis*

**Staff Contact**  
*Stephanie Locke*  
*Arlene Tavani*

*After staff reports have been distributed, if additional documents are produced by the District and provided to the Committee regarding any item on the agenda, they will be made available at 5 Harris Court, Building G, Monterey, CA during normal business hours. In addition, such documents may be posted on the District website at [www.mpwmd.net](http://www.mpwmd.net). Documents distributed at the meeting will be made available in the same manner.*

**AGENDA**  
**Water Demand Committee**  
**Of the Monterey Peninsula Water Management District**  
\*\*\*\*\*

Tuesday, September 18, 2018, 3:30 PM  
District Conference Room, 5 Harris Court, Building G, Monterey, CA

**Call to Order**

**Comments from Public** - *The public may comment on any item within the District's jurisdiction. Please limit your comments to three minutes in length.*

**Action Items** -- *Public comment will be received.*

1. Consider Adoption of July 10, 2018 Committee Meeting Minutes
2. Consider Request for Phase Two Project Funding: Broadway Water Conservation Garden at Martin Luther King Jr. Elementary School, 1713 Broadway Ave., Seaside
3. Consider Lawn Removal Rebate Request from Monterey Peninsula Unified School District for the International School of Monterey

**Discussion Items** – *Public comment will be received.*

4. Discuss Potential Water Conservation Demonstration Projects at Rancho Cañada Park
5. Discuss Rules and Regulations Clean Up Ordinance

**Set Next Meeting Date**

**Adjournment**

Upon request, MPWMD will make a reasonable effort to provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. MPWMD will also make a reasonable effort to provide translation services upon request. Requests should be sent by 5 pm on Friday, September 14, 2018, to the Board Secretary, MPWMD, P.O. Box 85, Monterey, CA, 93942. You may also fax your request to the Administrative Services Division at 831-644-9560, or call 831-658-5600.

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**WATER DEMAND COMMITTEE**

**ITEM: ACTION ITEM**

**1. CONSIDER ADOPTION OF JULY 10, 2018 COMMITTEE MEETING MINUTES**

**Meeting Date: September 18, 2018**

**From: David J. Stoldt,  
General Manager**

**Prepared By: Arlene Tavani**

**CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15378.**

**SUMMARY:** Attached as **Exhibit 1-A** are draft minutes of the July 10, 2018 Water Demand committee meeting.

**RECOMMENDATION:** The committee should adopt the minutes by motion.

**EXHIBIT**

**1-A** Draft Minutes of the July 10, 2018 Water Demand Committee Meeting



**EXHIBIT 1-A**

**DRAFT MINUTES**  
**Water Demand Committee of the**  
**Monterey Peninsula Water Management District**  
*July 10, 2018*

**Call to Order**

The meeting was called to order at 3:50 pm in the MPWMD conference room.

**Committee members present:** Andy Clarke, Chair  
Jeanne Byrne  
Molly Evans

**Committee members absent:** None

**Staff members present:** David Stoldt, General Manager  
Stephanie Locke, Water Demand Division Manager  
Stephanie Kister Campbell, Conservation Analyst  
Arlene Tavani, Executive Assistant

**District Council present:** No

**Comments from the Public:** No comments.

**Presentations**

- 1. David Chandler – Update on MPUSD Landscape Water Conservation Projects**  
David Chandler, Energy Specialist, with the Monterey Peninsula Unified School District (MPUSD), addressed the committee. He reported on completion of landscape water conservation projects at Martin Luther King Jr. Middle School partially funded by a grant from the Water Management District. He stated that 21,000 square feet of area covered with turf, juniper and ice plant were converted to drought tolerant landscape. He submitted a document titled Broadway Water Conservation Garden that described progress at the school site. He requested that the Board of Directors approve additional funding to complete the planned water conservation projects.

**Action Items**

- 2. Consider Adoption of April 18, 2018 Committee Meeting Minutes**  
On a motion by Byrne and second of Evans, minutes of the April 18, 2018 committee meeting were adopted unanimously on a vote of 3 – 0 by Byrne, Clarke and Evans.

## Discussion Items

### 3. **Discuss Rules & Regulations Clean-Up Ordinance**

Stephanie Locke, Water Demand Manager, provided a brief summary of the rule changes to be included in an ordinance for review by the Board of Directors at the July 16, 2018 meeting. She explained that the ordinance would amend the District's rebate program so that multi-family housing in disadvantaged communities would qualify for rebates for more than 20 toilets. This would allow Ecology Action to install water saving toilets and other fixtures in the areas identified as disadvantaged communities. The ordinance would also allow rebates for vendors that lease washers installed in common laundry rooms. Other features of the proposed ordinance are listed here. (a) The General Manager could approve an exemption to requirements for installation of fire service lines. (b) Following an audit by a certified landscape auditor, improvements to the landscape must be completed before a permit would be issued. (c) Areas outside of the Monterey Peninsula Water Resource area irrigated by wells would not be subject to a landscape watering day schedule. (d) Estimates of past and future water use capacity would be developed based on Rule 24. No public comment was directed to the committee on this item.

### 4. **Discuss Commercial Water Use Factors**

General Manager, Dave Stoldt, explained that staff was developing a plan for simplification of the water use factors such as: (a) removing some of the categories such as "bistro" and "family grocery"; and (b) along with the list of project categories would be an expanded explanation of what constitutes a type I, II or III use. Details of a proposed use would determine if it would fall under the Type I, II, or III category.

### 5. **Discuss Conservation Offset Program**

No discussion.

### 6. **Update from General Manager Stoldt on July 9, 2018 Meeting with State Water Resources Control Board**

Stoldt reported that on Monday, July 9, 2018, a meeting to discuss Condition 2 of Order 2009-0060 was held at offices of the State Water Resources Control Board (SWRCB). Those in attendance were seven SWRCB representatives including the Chief Council, three representatives from the District, four representatives from California-American Water, the City Manager for the City of Pacific Grove, representatives from the City of Sand City and Seaside, two representatives from the Carmel River Steelhead Association (CRSA), and a representative from the Sierra Club. Representatives from the District described our water neutral permitting approach and water credit regulations, and reiterated that use of water customer billing records to determine water use capacity is infeasible because those records are confidential information. The Sierra Club expressed opposition to water credit transfers, and the CRSA opposed any use of water due to illegal diversions. Mr. Stoldt described the meeting as "positive" and noted a follow-up meeting was set for July 27, 2018.

Public Comment: Luke Coletti noted that he would describe the meeting differently, but he agreed that it was positive and that the process was on the right track. He stated there was also discussion about the Pacific Grove Local Water Project.

**Set Next Meeting Date:** Tentatively set for September 18, 2018 at 3:30 pm.

**Adjournment:** The meeting was adjourned at 4:30 pm.

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## WATER DEMAND COMMITTEE

### ITEM: ACTION ITEM

#### 2. CONSIDER REQUEST FOR PHASE TWO PROJECT FUNDING: BROADWAY WATER CONSERVATION GARDEN AT MARTIN LUTHER KING JR. ELEMENTRY SCHOOL, 1713 BROADWAY AVE., SEASIDE

**Meeting Date:** September 18, 2018                      **Budgeted:** Yes

**From:** David J. Stoldt,                      **Program/**                      **Water Conservation**  
                    General Manager                      **Line Item No.:** 4-2-2-F, 4-2-2-H

**Prepared By:** Stephanie Kister                      **Cost Estimate:** \$30,000

**General Counsel Review:** N/A

**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301.

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**SUMMARY:** During Fiscal Year (FY) 2017-18, MPWMD partnered with Monterey Peninsula Unified School District (MPUSD) and others to remove a highly visible sloped section of lawn, ice plant, and juniper along Broadway Avenue in Seaside at Martin Luther King Jr. School (MLK) and replaced it with a community water conservation demonstration garden (**Exhibit 2-A**).

MPUSD is requesting \$30,000 during FY 2018-19 to complete the water conservation garden. Funding for this community demonstration project is available in the Fiscal Year 2018-19 project budget from School Retrofits (26-05-781184) and Graywater/Rainwater Demo Project (26-05-781185). Staff has requested additional detail on the budget for this project and will present that information at the meeting.

The Board of Directors approved \$30,000 in FY 2017-18 for the project which consisted of drought tolerant plants, storm water infiltration features, a rain watering system, drip irrigation and interpretive educational signage. In the first year of the project, the funds enabled the removal of all turf, ice plant and juniper. The upper section of the hillside was planted with drought tolerant plants, two cisterns were installed, a rain garden was built, and high-quality benches were installed. This year's request for an additional \$30,000 would allow the lower two sections of the project to be completed.

**PROJECT DESCRIPTION:** The hillside has been fully scraped and is presently covered with mulch. The unfinished lower two sections will be planted with drought tolerant plants and be fully incorporated into the first phase design. MPUSD will provide the staff and equipment to install decorative and functional rock, a split rail fence, build storm water infiltration basins along the bottom of the hillside, and a rainwater harvesting system will be installed along the front of the building to irrigate the area by gravity feed. Additional drought tolerant plants will be selected and sourced with the help of Return of the Natives (RON) from California State University

Monterey Bay. RON will also organize, promote, and lead two garden parties where community members are invited to help install plants and help maintain them in the future. MLK students will be invited to assist with the project by adding artwork and helping with planting. An efficient irrigation system may be installed to augment rainwater supplies during the establishment period. Signage about the demonstrated water conservation practices will be installed throughout the project, recognizing MPWMD as a major sponsor.

In addition to funding from MPWMD and over 600 hours of MPUSD staff time and volunteer hours, the water conservation garden has been financially supported by both MPUSD and a State Water Resources Control Board Drought Response Outreach Program for Schools (DROPS) grant. When the project is complete, the landscape will be maintained by MPUSD staff, with support from periodic volunteer work groups from Shoreline Church, RON, and school staff/students. The project will leave a lasting educational experience for visitors for years to come.

## **EXHIBIT**

### **2-A Water Conservation Garden Proposal**

EXHIBIT 2-A



**Monterey Peninsula Water Management District  
GRANT PROPOSAL  
For  
Monterey Peninsula Unified School District**

**Broadway Water Conservation Garden**

Name of Applicant: Monterey Peninsula Unified School District  
Invoicing & Contract Name & Contact Information: Ryan Altemeyer , Associate Superintendent of Business Services  
(831) 645-1269 [raltemeyer@mpusd.k12.ca.us](mailto:raltemeyer@mpusd.k12.ca.us)  
700 Pacific St, Monterey, CA 93940 or PO BOX 1031 Monterey CA 93942  
Project Manager Name & Contact Information: David Chandler, Coordinator of Renewable Energy and Conservation  
(831) 901-7376 [dchandler@mpusd.k12.ca.us](mailto:dchandler@mpusd.k12.ca.us)  
Project Site Addresses: 1.. Martin Luther King School  
1713 Broadway Ave, Seaside, CA 93955  
Account: City of Seaside Water: 04-7590-00

Proposed turf removal: **Phase I Turf removal 13,424 sq feet**  
**Ice plant and Juniper removal/ management 8256 sq ft**  
**\$30,000 Complete**

**Phase II. Continue the water conservation demonstration garden by completing the landscape 21,680 sq.ft. \$30,000**

Proposed Projects: **Phase I** -Proposal will fund a start-up of Partnership Drought Tolerant Landscape Demonstration garden on the Broadway Avenue side of King Elementary. The demonstration garden will educate the community about water conserving landscapes. The design will include Sheet mulching, Cisterns, dry creek beds, succulent gardens, rain gardens, bio-swales as well as a variety of no-water landscapes. **Complete**  
**Phase II-** Proposal will fund a continuation and full implementation of Partnership Drought Tolerant Landscape Demonstration garden on the Broadway Avenue side of King Elementary. The demonstration garden will educate the community about water conserving landscapes. The design will include Sheet mulching, Cisterns, dry creek beds, succulent gardens, rain gardens, bio-swales as well as a variety of no-water landscapes



## EXHIBIT 2-A

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

### **Preliminary to proposed project**

In spring 2014 MPUSD received a grant from MPWMD to install Hydro-point weather trak ET Pro controllers at the Cal Am serviced sites. The grant proposal was met and exceeded by installing all the controllers, as well as eliminating manual and battery operated zones.

In 2014 MPWMD funded a field retrofit and master water conservation Plan for Ord Terrace Elementary. This project has inspired MPUSD to commit to water conservation landscapes. Ord terrace eliminated 100% of the ornamental turf and replaced it with drought tolerant landscape. **Water use has been reduced at Ord Terrace by 63%.**

In summer of 2015 MPUSD funded and installed 27 Hydro-point weather trak ET controllers at the City of Seaside and Marina Coast water serviced sites. Making the districts irrigation fully controlled by Smart weather based irrigation controllers

In summer of 2015 MPUSD administration and board approved the use of water utility savings to be used to retrofit our fields irrigation, implement a turf removal plan and set up a turf maintenance program. The MPUSD Energy Program in collaboration with the facilities department has created a six year field retrofit plan and a six year Ornamental Turf removal plan.

In the 2015-16 school year MPUSD is implementing a 5<sup>th</sup> grade Eco- Ambassador program. Throughout the school year all 5<sup>th</sup> grade students will take classes from Return of the Native, Pacific Grove Museum and Monterey Art Council. Part of the goal of this program is to educate the students about water conservation and to create a Native garden with passive and active storm water catchment. The designs for these gardens are inspired by the professional designs funded by the Ord Terrace grant.

In 2016 City of Seaside and MPWMD funded \$20,000 turf removal incentive for the 87,000 square feet of turf eliminated in the King Sports Complex field retrofit project.

As the Coordinator of Renewable Energy and Conservation. I am working diligently to conserve water across the whole school district. The momentum of the MPUSD water conservation plan is growing. MPUSD is committed to reduce the need for water across the district. By 2021 we have the goal of reducing ornamental turf by 65% and to retrofit every field with efficient irrigation systems including flow sensors and master valves. MPUSD has been asked to speak at a state level as a leader in school districts water conservation. **MPUSD has reduced its water use by 58% compared to the base year of 2013.**

In 2016 MPUSD was awarded a Drought Response Outreach Program for Schools Grant to implement Storm water LID projects and education at 4 Seaside Schools.

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

In 2017/18 school year MPUSD completed the 10,554 square feet of turf removal at MLK school. MPUSD also successfully completed the start-up of the MPWMD and MPUSD Broadway Water Conservation Garden at MLK school.

In 2018/19 school year MPUSD will continue to work with MPWMD on the Broadway Water Conservation Garden. In addition MPUSD will be implementing water conservation projects at multiple sites across our district.

I look forward to working with MPWMD for many years.

Thank you

David Chandler

Coordinator of Renewable Energy and Conservation

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**APPLICATION ATTACHMENTS**

**1- SITE PHOTOS (before)..... 4-6**  
**2- PROPOSED PLAN ..... 7-8**  
**3- ESTIMATED BUDGET ..... 8**  
**4- PROJECT TIMELINE..... 8**  
**5- MAINTENANCE PLAN ..... 9**  
**6- WATER SAVINGS..... 9**  
**7- CURRENT LANDSCAPING INFORMATION/ PHOTOS ..... 9-11**

**ATTACHMENT 1**

**SITE Photo**



**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal



**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal



**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 2  
PROPOSED PLAN**

Site

Project

1. Martin Luther  
King Jr. School

Broadway  
demonstration  
Garden

Turf removal, Ice plant and juniper removal / management. MPWMD demonstration garden grant funds will be used to create a water conservation demonstration garden: Designs may include

- Bio-swale **complete**
- Cisterns **2 installed**
- Succulent Gardens
- Sheet Mulching **Complete**
- Scape and Mulch **21,680 square feet Complete**
- Dry creek
- Rain garden **Complete**

Additional Phase I

- Sheet Mulching Class
- Rain garden Class with Community planting
- Drought Tolerant Class with Community Planting.
- Native Garden planting with oak chaparral pallet
- Benches with school ideals and mission statements
- Professionally Engineered design
- Irrigation and water access for gardens

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

Continued for Phase II

- Complete the landscape per design for the lower section of the project per design.
- Continue to offer community classes and events

**ATTACHMENT 3**

**BUDGET**

**Monterey Peninsula Water Management District  
LANDSCAPE GRANT PROPOSAL  
MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT**

**BUDGET \$30,000**

**Additional cost for of 2017/18 implementation above MPUSD/DROPS grant budget and MPWMD reimbursement \$10,000**

**\$.92 /sq.ft. for 21,680 sq.ft. landscape- \$20,000 Landscape material, supplies and labor**

**MPUSD will provide In-Kind Matching funds: Design, equipment, material and labor**

**ATTACHMENT 4**

**PROJECT TIMELINE**

Upon MPWMD award of proposal MPUSD and MPWMD will continue working on the Garden during the 2018/19. Demonstration Garden is ready to continue to offer classes The demonstration garden is ready for continued community planting days.

**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 5**

**MAINTENANCE PLAN**

The MPUSD maintenance department will maintain the area. This maintenance will be scheduled weekly. In addition since it is a partnership volunteer groups will be scheduled 2-3 times a year for planting and maintenance.

David Chandler, the MPUSD Coordinator of Renewable Energy and Conservation, will oversee implementation and maintenance of the project.

**ATTACHMENT 6**

**WATER SAVINGS**

Currently Martin Luther King Jr. School has 24,332 square feet of irrigated non-essential grass. With the current size and irrigation efficiency the area proposed by this project would use 420,524 gallons of water annually. The new proposal would abandon the current irrigation and water using cisterns, gravity feed and hand watering. This area as a drought tolerant garden would use 66,583 gallons, 20%+ of that would be stored in cisterns. This proposal will reduce water use 353,941 gallons, a 84%+ reduction in water use.

**ATTACHMENT 7**

**CURRENT LANDSCAPING INFORMATION**

	<u>H2O Requirement</u>	<u>Current Irrigation</u>
Drought tolerant landscape	21680 sq. ft.	Drip irrigation/ Cisterns



**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal



**EXHIBIT 2-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal



## WATER DEMAND COMMITTEE

### ITEM: ACTION ITEM

#### 3. CONSIDER LAWN REMOVAL REBATE REQUEST FROM MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT FOR THE INTERNATIONAL SCHOOL OF MONTEREY

**Meeting Date:** September 18, 2018                      **Budgeted:** Yes

**From:** David J. Stoldt,                                      **Program/**                      4-2-4-C  
General Manager    **Line Item No.:**

**Prepared By:** Stephanie Locke                              **Cost Estimate:** \$25,067

**General Counsel Review:** N/A

**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301.

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**SUMMARY:** District Rule 141, Water Conservation Rebates, allows a lawn removal rebate at a public facility to exceed the square-footage limitation of 2,500 square-feet (sf<sup>2</sup>), subject to Board approval. Monterey Peninsula Unified School District (MPUSD) has requested \$25,067 for the removal of 25,067 sf<sup>2</sup> of turf located at the International School of Monterey (ISM), 1720 Yosemite Avenue in Seaside (**Exhibit 3-A**).

Currently, ISM's lower field has 46,799 sf<sup>2</sup> of irrigated play grass, and there is 4,053 sf<sup>2</sup> of non-essential turf in front of the school. The current 50,852 sf<sup>2</sup> of turf uses approximately 1,593,005 gallons of water annually. The new proposal would abandon the current irrigation and focus the irrigation to an area of play. This area's size will be decreased, and irrigation efficiency improved. The new field area of 25,785 sf<sup>2</sup> will use 575,521 gallons. This proposal will reduce water use by 1,017,481 gallons (3.1 AFA), a 63 percent reduction in water use annually. The field irrigation would also have a flow sensor and master valve reducing water waste caused by irrigation breaks.

As the school is served by the Seaside Municipal Water System, rebates are funded by the MPWMD Rebate account. There is approximately \$40,000 available in this account for fiscal year 2018-19. Estimated water savings for this project is 1,017,481 gallons/year (3.1 AFA).

**RECOMMENDATION:** The Water Demand Committee should recommend that the Board postpone action on this request until after the completion of the HEART Project. The HEART Project is utilizing the MPWMD Rebate account to provide water efficient toilets, clothes washers and dishwashers in the Disadvantage Communities (DAC) in Seaside. Use of the MPWMD Rebate account for MPUSD's turf removal project could potentially prevent DAC residents from receiving important water-saving retrofits that will save money on their water and power bills and result in far more significant water savings. Following completion of the HEART Project, remaining rebate funds would be available for this request.

**EXHIBIT**  
**3-A MPUSD Proposal**

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**EXHIBIT 3-A**



**Monterey Peninsula Water Management District  
GRANT PROPOSAL  
For  
Monterey Peninsula Unified School District**

**Turf removal**

Name of Applicant: Monterey Peninsula Unified School District

Invoicing & Contract Name & Contact Information: Brett McFadden, Associate Superintendent of Business Services  
(831) 645-1269 [raltmeyer@mpusd.k12.ca.us](mailto:raltmeyer@mpusd.k12.ca.us)  
700 Pacific St, Monterey, CA 93940 or PO BOX 1031 Monterey CA 93942

Project Manager Name & Contact Information: David Chandler, Coordinator of Renewable Energy and Conservation  
(831) 901-7376 [dchandler@mpusd.k12.ca.us](mailto:dchandler@mpusd.k12.ca.us)

Project Site Addresses: 1.. International School of Monterey  
1720 Yosemite Ave, Seaside, CA 93955

Account: City of Seaside Water: 03-7580-00

Proposed turf removal: **Turf removal 25,067 square feet  
Requesting \$1 per square foot Turf removal incentive.  
\$25,067**

Proposed Projects: MPUSD's water conservation program is dedicated to improving schools landscape and Athletic Fields. This project will take the existing irrigated play field of 50,852 sq. ft. and convert it into a walking track, and multi-play area sized for pinto league baseball, grass volleyball or a U10 soccer. The play area project will remove 21,014 square feet of turf. 4053 square feet in the front of the school will be converted into drought tolerant landscape.

## EXHIBIT 3-A

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

### **Preliminary to proposed project**

In spring 2014 MPUSD received a grant from MPWMD to install Hydro-point weather trak ET Pro controllers at the Cal Am serviced sites. The grant proposal was met and exceeded by installing all the controllers, as well as eliminating manual and battery operated zones.

In 2014 MPWMD funded a field retrofit and master water conservation Plan for Ord Terrace Elementary. This project has inspired MPUSD to commit to water conservation

landscapes. Ord terrace eliminated 100% of the ornamental turf and replaced it with drought tolerant landscape. Water use has been reduced at Ord Terrace by 63%.

In summer of 2015 MPUSD funded and installed 27 Hydro-point weather trak ET controllers at the City of Seaside and Marina Coast water serviced sites. Making the districts irrigation fully controlled by Smart weather based irrigation controllers

In summer of 2015 MPUSD administration and board approved the use of water utility savings to be used to retrofit our fields irrigation, implement a turf removal plan and set up a turf maintenance program. The MPUSD Energy Program in collaboration with the facilities department has created a six year field retrofit plan and a six year Ornamental Turf removal plan.

In the 2015-16 school year MPUSD is implementing a 5<sup>th</sup> grade Eco- Ambassador program. Throughout the school year all 5<sup>th</sup> grade students will take classes from Return of the Native, Pacific Grove Museum and Monterey Art Council. Part of the goal of this program is to educate the students about water conservation and to create a Native garden with passive and active storm water catchment. The designs for these gardens are inspired by the professional designs funded by the Ord Terrace grant.

In 2016 City of Seaside and MPWMD funded \$20,000 turf removal incentive for the 87,000 square feet of turf eliminated in the King Sports Complex field retrofit project.

As the Coordinator of Renewable Energy and Conservation. I am working diligently to conserve water across the whole school district. The momentum of the MPUSD water conservation plan is growing. MPUSD is committed to reduce the need for water across the district. By 2021 we have the goal of reducing ornamental turf by 65% and to retrofit every field with efficient irrigation systems including flow sensors and master valves. MPUSD has been asked to speak at a state level as a leader in school districts water conservation. MPUSD has reduced its water use by 58% compared to the base year of 2013.

In 2016 MPUSD was awarded a Drought Response Outreach Program for Schools Grant to implement Storm water LID projects and education at 4 Seaside Schools.

In 2017-18 MPUSD partnered with MPWMD to remove 13,424 sq. ft. of turf and create a partnership water conservation demonstration garden on Broadway Ave.

**EXHIBIT 3-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

In 2017-18 MPUSD received \$10,540 for turf removal incentive to make Martin Luther King a site with zero non-essential turf.

In 2018-19 MPUSD is requesting a second year of funding for the Partnership with MPWMD water conservation demonstration garden on Broadway Ave.

I look forward to working with MPWMD for many years.

Thank you

David Chandler

Coordinator of Renewable Energy and Conservation

**APPLICATION ATTACHMENTS**

**1- SITE photos ..... 4**  
**2- PROPOSED PLAN ..... 5**  
**3- ESTIMATED BUDGET ..... 5**  
**4- PROJECT TIMELINE..... 5**  
**5- MAINTENANCE PLAN ..... 6**  
**6- WATER SAVINGS..... 6**  
**7- CURRENT LANDSCAPING INFORMATION ..... 6**

**EXHIBIT 3-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 1**

**SITE Photo**





**EXHIBIT 3-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 2**

**PROPOSED PLAN**

<u>Site</u>	<u>Project</u>	
1. International School of Monterey	Turf removal	Retrofit field to have an efficient irrigation with head to head coverage, fractional stations and flow sensors and master valve. Focused irrigation to play area. Turf removal by creating a 20 perimeter walking track 100 ft diameter baseball infield and a drought tolerant landscape.

**ATTACHMENT 3**

**BUDGET**

<p><b>Monterey Peninsula Water Management District LANDSCAPE GRANT PROPOSAL MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT BUDGET \$55,127 total field retrofit project</b></p> <p><b>Turf removal: 25,067 square feet</b></p> <p><b>Turf removal funds: \$1 per square foot: \$25,067</b></p>
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**ATTACHMENT 4**

**PROJECT TIMELINE**

Upon MPWMD award of proposal MPUSD and the other funding approval project planning and design will start. The turf removal will be complete by June 30<sup>th</sup>, 2019.

**EXHIBIT 3-A**

Monterey Peninsula Unified School District  
Monterey Peninsula Water Management District  
Water Conservation Grant Proposal

**ATTACHMENT 5**

**MAINTENANCE PLAN**

The MPUSD maintenance department will maintain the area. This maintenance will be scheduled Weekly.

David Chandler, the MPUSD Coordinator of Renewable Energy and Conservation, will oversee implementation of proposed project.

**ATTACHMENT 6**

**WATER SAVINGS**

Currently International School of Monterey lower field has 46,799 square feet of irrigated play grass and 4053 square feet on non-essential turf. The current field of 50,852 sq ft of turf would use 1,593,005 gallons of water annually. The new proposal would abandon the current irrigation and focus the irrigation to an area of play. This areas size will be decreased and irrigation efficiency improved. The new field area of 25,785 square feet use 575,521 gallons, This proposal will reduce water use 1,017,481 gallons, a 63% reduction in water need annually. The field irrigation would also have a flow sensor and master valve reducing water waste caused by irrigation breaks.

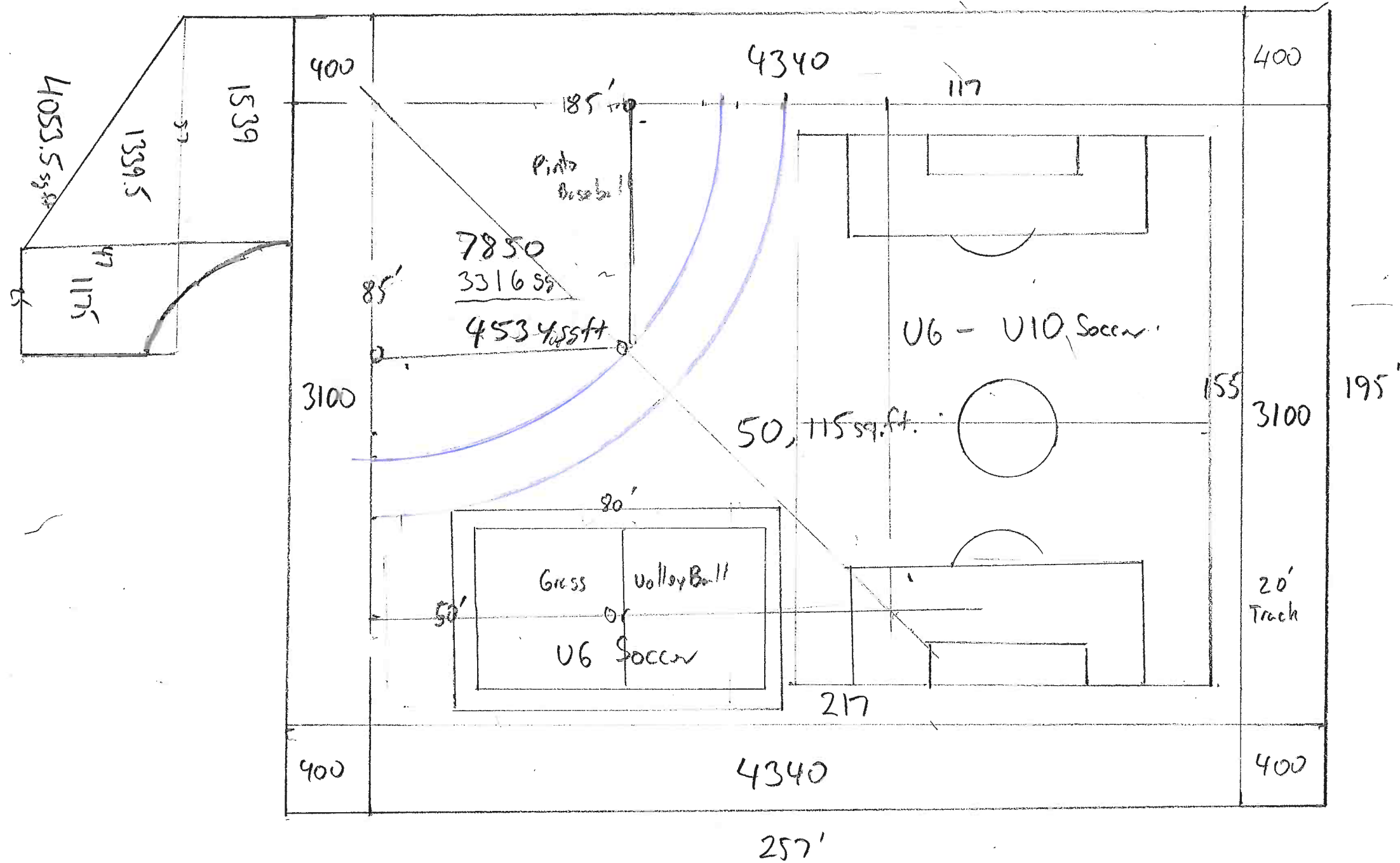
**ATTACHMENT 7**

**CURRENT LANDSCAPING INFORMATION**

	<u>H2O Requirement</u>	<u>Current Irrigation</u>
Field	Turf (High) 50,852 sqft	Hunter I core , poor mapping approx..57% efficiency

EXHIBIT 3-A

Existing field 50,115 sqft with 3316 D6 infield + 4053 sqft Ornamental. = 50,852 sqft  
 New field. 33635 sqft with 7850 D6 infield. = 25785  
25067  
 Turf Removal.



16,480  
 + 4053  
20,533 sqft  
 + 4534 sqft  
25067 sqft

## WATER DEMAND COMMITTEE

### ITEM: DISCUSSION ITEM

#### 4. DISCUSS POTENTIAL WATER CONSERVATION DEMONSTRATION PROJECTS AT RANCHO CANADA PARK

**Meeting Date:** September 18, 2018      **Budgeted:** Yes

**From:** David J. Stoldt,      **Program/** 4-2-4-C  
General Manager      **Line Item No.:**

**Prepared By:** Stephanie Kister      **Cost Estimate:**

**General Counsel Review:** N/A

**Committee Recommendation:** N/A

**CEQA Compliance:** This action does not constitute a project as defined by the California Environmental Quality Act Guidelines section 15301.

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**DISCUSSION:** The Monterey Peninsula Regional Park District recently opened the Palo Corona Regional Park at the former Rancho Canada Golf Club. They have invited MPWMD to create an educational display for their discovery center. Preliminary costs for the display and design are around \$5,000. They are also interested in collaborating with the District to build a water conservation demonstration project on the site. Suggested projects include:

**Large Scale Rainwater Harvesting System:** The main building has a large basement area that could accommodate a large volume of rainwater storage. The roof system seems to already have the down spouts tied together, making it easier to route the water to storage tanks. Captured water would be used to irrigate the lawn around the building which is used for weddings. A second phase of this project would use the captured water to supply a new restroom building for flushing toilets.

**Small Rainwater Harvesting System with Drought Tolerant Plants:** Along the east side of the parking lot is a large shop building (formerly golf cart storage). There is space for several slimline cisterns along the building which would be visible to park visitors. The water would be used to irrigate new drought tolerant plants along the building.

**Lawn Removal:** The site is currently used as a wedding venue and most of the remaining irrigated turf is needed for that purpose. However, there is one section of turf at the east side/rear of the building that is available for turf conversion.

**RECOMMENDATION:** Staff requests that the Water Demand Committee discuss this item and provide direction/feedback.

### EXHIBIT

None