



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

Water Demand Committee Members:

*Molly Evans, Chair
Andy Clarke
Jeanne Byrne*

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. Documents distributed at the meeting will be made available in the same manner.

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

Monday, July 31, 2017, 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 April 25, 2017 Committee Meeting Minutes
2. Consider Funding for Community Water Conservation Demonstration Project at Martin Luther King Jr. Elementary School, 1713 Broadway Ave, Seaside
3. Consider Lawn Removal Rebate Request from Monterey Peninsula Unified School District for Martin Luther King Jr. School

Discussion Items – *Public comment will be received.*

4. Discuss Water Conservation Offset Program
5. Discuss Retrofit Requirement for Multi-family Residential

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 Thursday, July 27, 2017, 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 APRIL 25, 2017 COMMITTEE MEETING MINUTES

Meeting Date: July 31, 2017

**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 April 25, 2017 Water Demand committee meetings.

RECOMMENDATION: The committee should adopt the minutes by motion.

EXHIBIT

1-A Draft Minutes of the April 25, 2017 Water Demand Committee Meeting



EXHIBIT 1-A

DRAFT MINUTES
Water Demand Committee of the
Monterey Peninsula Water Management District
April 25, 2017

Call to Order

The meeting was called to order at 3:05 pm in the MPWMD conference room.

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

Committee members absent: None

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

Comments from the Public: No comments.

Action Items

1. **Consider Adoption of February 13, 2017 Committee Meeting Minutes**
On a motion by Byrne and second of Clarke, minutes of the February 13, 2017 committee meeting were adopted unanimously on a vote of 3 – 0 by Byrne, Clarke and Evans.

2. **Consider Rebate for a Laundry Water Recycling System at the Asilomar Conference Grounds**
Byrne offered a motion to recommend that the Board of Directors approve issuance of a \$20,000 rebate to Water City for the laundry water recycling system installed at Asilomar. The motion was seconded by Clarke and approved on a vote of 3 – 0 by Byrne, Clarke and Evans.

Set Next Meeting Date: No date was scheduled.

Adjournment

The meeting was adjourned at 3:20 pm.

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Community Partners: MPUSD, Return of the Natives, CSU Monterey Bay, MEarth, Monterey One Water, Monterey Regional Waste Management District, California Landscape Contractors Association, and Save the Whales.

The total requested from MPWMD for this Community Demonstration Garden is \$30,000 which is available in the Fiscal Year 2017-18 budgets for School Retrofits (26-05-781184) and Graywater/Rainwater Demo Project (26-05-781185).

RECOMMENDATION: Staff recommends the Committee support this Community Demonstration Garden and recommend that the Board approve funding not to exceed \$30,000 for the Broadway Community Demonstration Garden project.

EXHIBITS

- 2-A** Community Demonstration Garden Proposal
- 2-B** Proposed CDG Plan
- 2-C** Site Photos

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: Brett McFadden, Associate Superintendent of Business Services
(831) 645-1269 bmcfadden@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
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: **Turf removal 13,424 sq feet
Ice plant and Juniper removal/ management 8256 sq ft
\$30,000**

Proposed Projects: 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.

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.

EXHIBIT 2-A

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

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 5th grade Eco- Ambassador program. Throughout the school year all 5th 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.

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 MAPS 3-5
2- PROPOSED PLAN..... 6
3- ESTIMATED BUDGET 7
4- PROJECT TIMELINE 7
5- MAINTENANCE PLAN 8
6- WATER SAVINGS 8
7- CURRENT LANDSCAPING INFORMATION 8

ATTACHMENT 1

SITE Photo

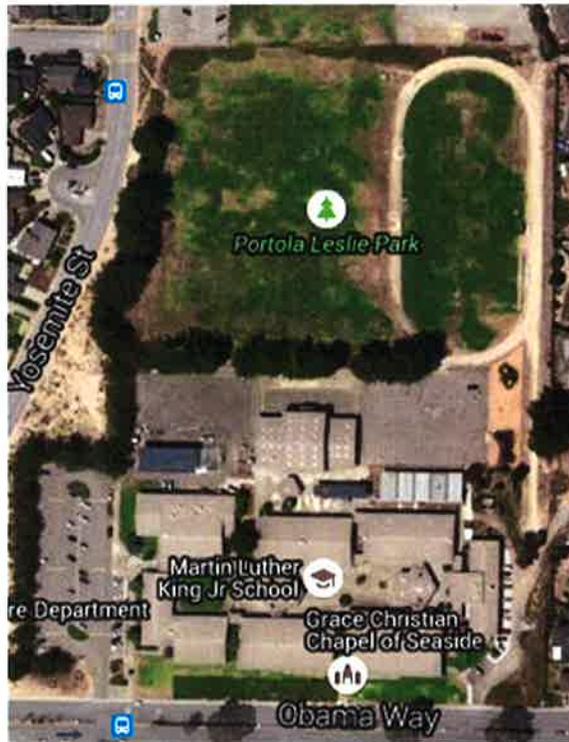


EXHIBIT 2-A

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**

<u>Site</u>	<u>Project</u>	
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 <ul style="list-style-type: none">• Bio-swale• Cisterns• Succulent Gardens• Sheet Mulching• Scape and Mulch• Dry creek• Rain garden

EXHIBIT 2-A

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

ATTACHMENT 3

BUDGET

**Monterey Peninsula Water Management District
LANDSCAPE GRANT PROPOSAL
MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT
BUDGET \$33,000**

**Turf removal 13,424 square feet
Juniper/ iceplant management/removal 8256
Total Area: 21680**

**Turf removal funds \$1.38 per square foot: \$30,000 (Plants, Cisterns, benches,
landscape material)**

MPUSD will provide In-Kind Matching funds: equipment and labor

ATTACHMENT 4

PROJECT TIMELINE

Upon MPWMD award of proposal MPUSD and MPWMD will start working on Design July-August. Turf removal/ storm water engineering would be complete February 2018. The demonstration garden would be ready to plant in Spring 2018. With an opening celebration Scheduled Summer 2018.

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 monthly. 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 of proposed irrigation projects.

ATTACHMENT 6

WATER SAVINGS

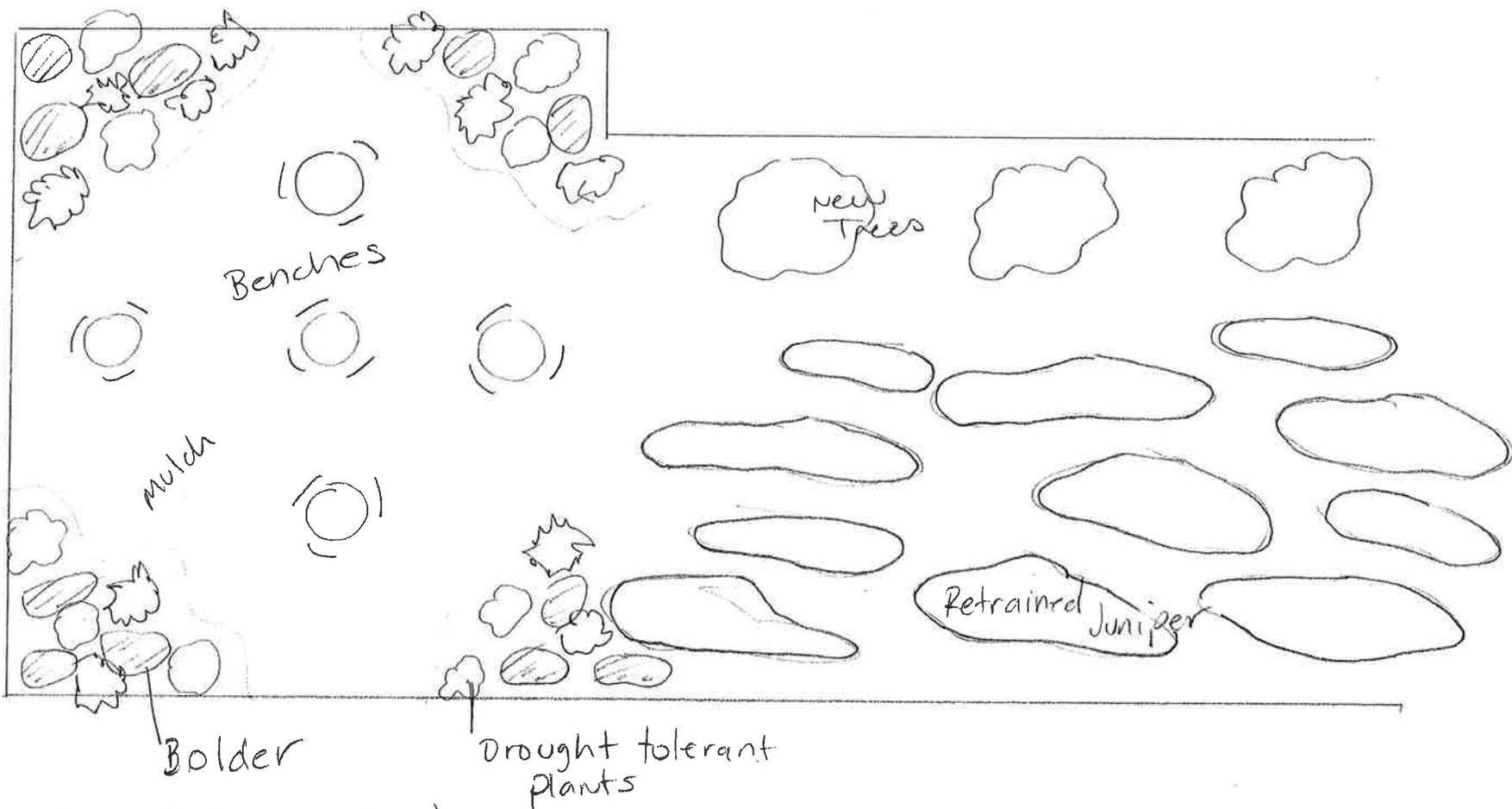
Currently Martin Luther King Jr. School has 24,332 square feet of irrigated non-essential grass. With the current size and irrigation efficiency the area proposed by this project would use 420,524 gallons of water annually. The new proposal would abandon the current irrigation and water using cisterns, 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

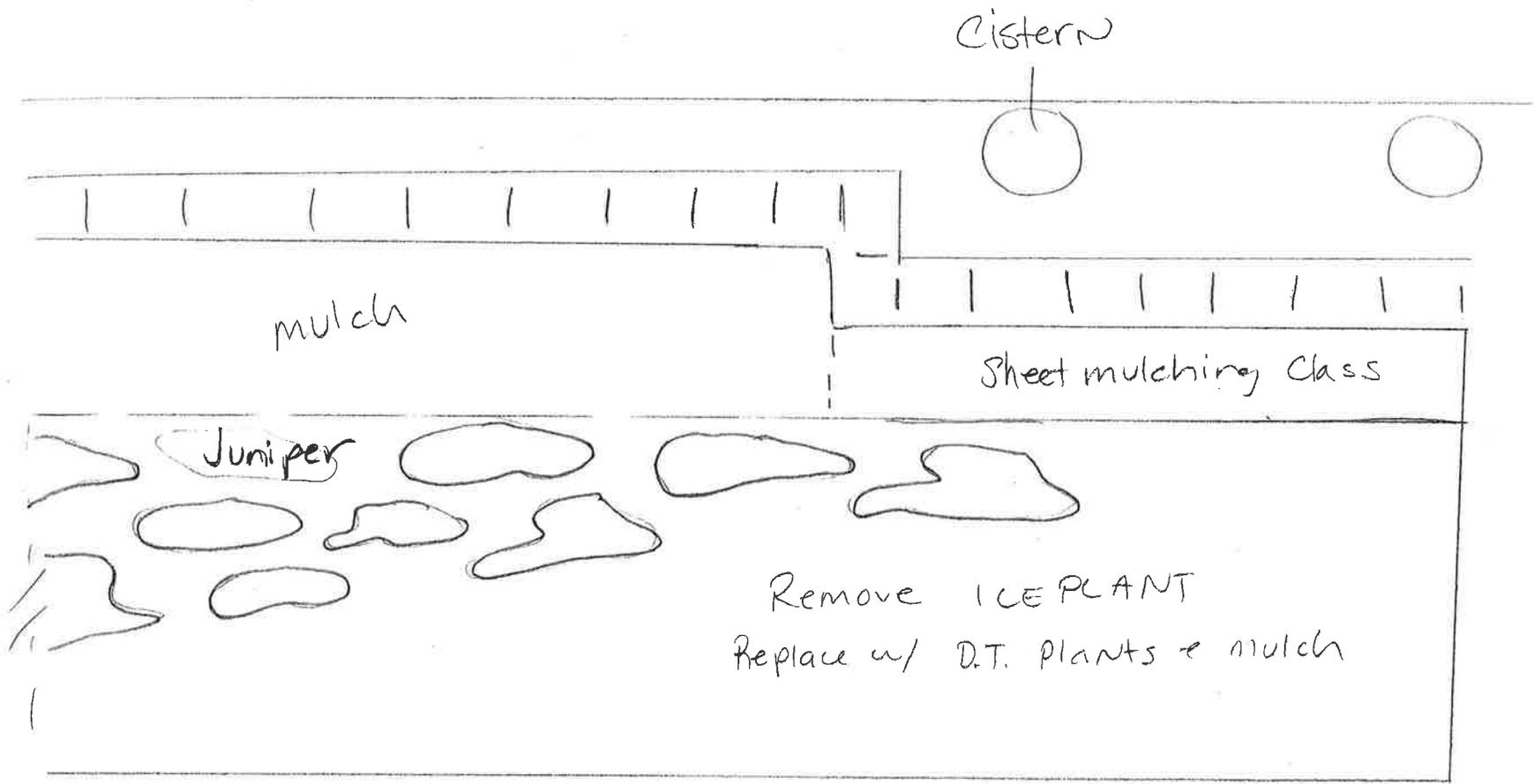
	<u>H2O Requirement</u>	<u>Current Irrigation</u>
Field	Turf (High) 13,424 sq. ft.	MP rotors

EXHIBIT 2-B



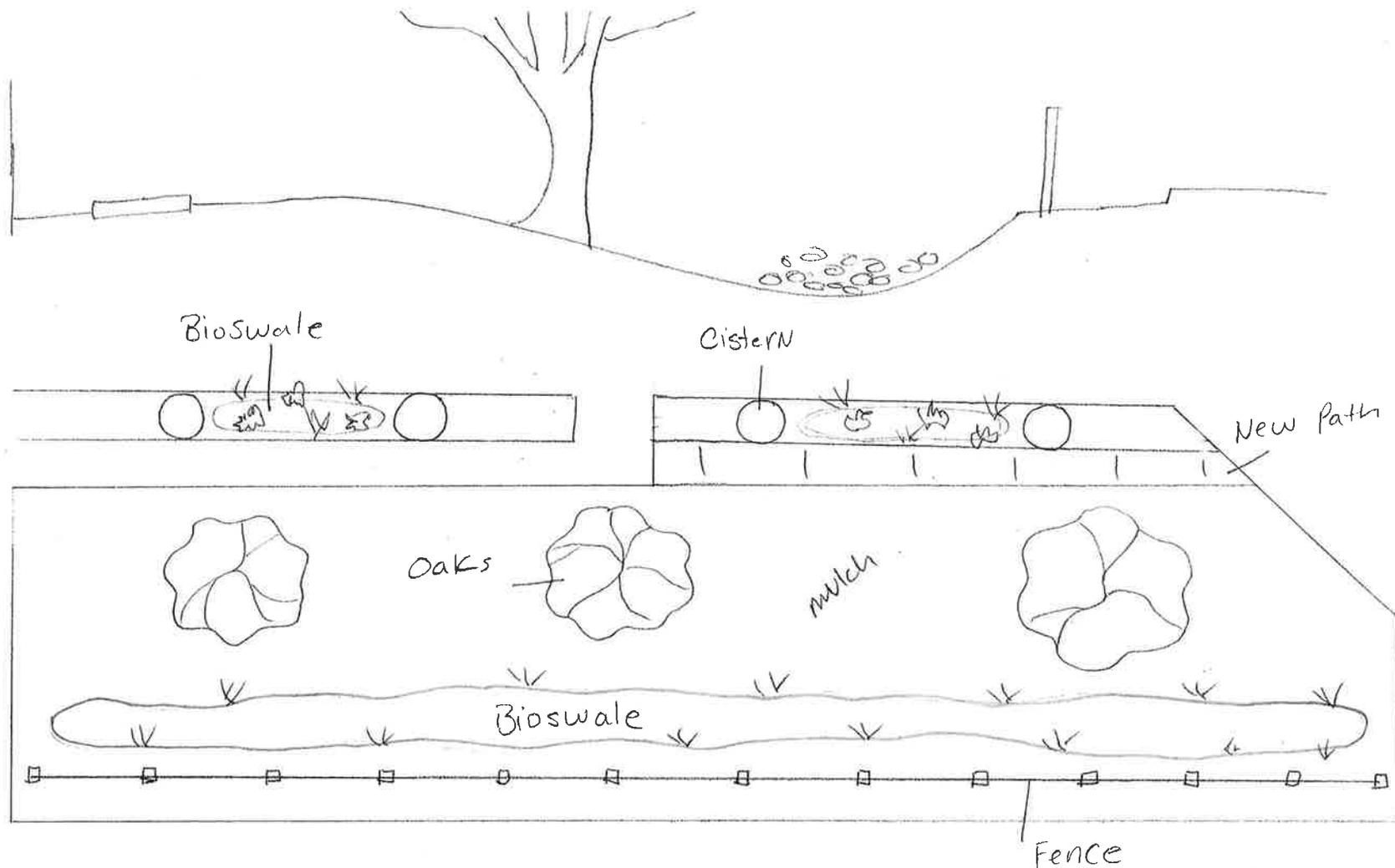
LOWER SECTION

EXHIBIT 2-B



MIDDLE SECTION

EXHIBIT 2-B



UPPER SECTION

EXHIBIT 2-C



Lower Section

EXHIBIT 2-C



Middle Section

EXHIBIT 2-C



Upper Section

is to reduce ornamental turf by 65 percent and to retrofit every irrigated field with water efficient irrigation systems by 2021.

In 2015-2016, MPUSD implemented a 5th grade Eco-Ambassador Program in partnership with Return of the Natives, Pacific Grove Museum, and the Arts Council for Monterey County. The goals of the program include educating the students about water conservation, creation of a native plant garden, and installing active rainwater catchment. MPUSD has applied for lawn removal rebates at various sites over the last four years and has used the money to fast-track their conservation efforts. The Eco-Ambassador Program is tied to the lawn conversion projects. The designs for the new gardens were inspired by the professional landscape designs created for Ord Terrace Elementary School which received a grant from MPWMD in 2014.

RECOMMENDATION: Staff recommends the Water Demand Committee approve the request and recommend to the Board that a Lawn removal rebate in the amount of \$10,508 be granted for the MPUSD project at Martin Luther King Jr. School.

EXHIBITS

3-A MPUSD Proposal

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 bmcfadden@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
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: **Turf removal 10,508 sq feet
Requesting \$1 per square foot Turf removal incentive.
\$10,508**

Proposed Projects: MPUSD's water conservation program is dedicated to improving schools landscape by creating drought tolerant educational learning gardens and environments. In 2017-18 with the funding of the Broadway Demonstration Garden all 23,932 square feet of non-essential turf will be removed and converted into high quality drought tolerate Landscapes.

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

EXHIBIT 3-A

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

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.

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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 MPUSD has applied to MPWMD to remove 13,424 sqft of turf and create a partnership 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

EXHIBIT 3-A

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

APPLICATION ATTACHMENTS

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

ATTACHMENT 1

SITE Photo



EXHIBIT 3-A

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



EXHIBIT 3-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

Turf removal

Turf removal. Design and implement
drought tolerant Landscapes and Learning
environments.

EXHIBIT 3-A

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

ATTACHMENT 3

BUDGET

**Monterey Peninsula Water Management District
LANDSCAPE GRANT PROPOSAL
MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT
BUDGET \$10508**

Turf removal 10,508 square feet

Turf removal funds \$1 per square foot: \$10,508 (Plants, Cisterns, benches, landscape material)

MPUSD will provide In-Kind Matching funds: equipment and labor

ATTACHMENT 4

PROJECT TIMELINE

Upon MPWMD award of proposal MPUSD and MPWMD will start working on Design July-August. Turf removal/ storm water engineering would be complete February 2018. The demonstration garden would be ready to plant in spring 2018.

ATTACHMENT 5

MAINTENANCE PLAN

The MPUSD maintenance department will maintain the area. This maintenance will be scheduled monthly. 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 of proposed irrigation projects.

EXHIBIT 3-A

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

ATTACHMENT 6

WATER SAVINGS

Currently Martin Luther King Jr. School has 24,332 square feet of irrigated non-essential grass. 10,504 sq ft of turf would use 329,051 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 52,099 gallons, 20%+ of that would be stored in cisterns. This proposal will reduce water use 276,952 gallons, a 84%+ reduction in water use.

ATTACHMENT 7

CURRENT LANDSCAPING INFORMATION

	<u>H2O Requirement</u>	<u>Current Irrigation</u>
Field	Turf (High) 10,504 sq. ft.	MP rotors

WATER DEMAND COMMITTEE

5. DISCUSS RETROFIT REQUIREMENT FOR MULTI-FAMILY RESIDENTIAL SITES

Meeting Date:	July 31, 2017	Budgeted:	N/A
From:	David J. Stoldt, General Manager	Program/ Line Item No.:	N/A N/A
Prepared By:	Stephanie Locke	Cost Estimate:	N/A

General Counsel Review: N/A

Committee Recommendation: The Water Demand Committee considered this item on July 31, 2017, and recommended _____.

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

SUMMARY: Senate Bill 407 (Padilla) approved by the Governor on October 11, 2009, requires owners of Multi-Family Residential and commercial real property built prior to January 1, 1994, to replace older water fixtures with new water efficient fixtures by January 1, 2019. The plumbing fixtures required to be replaced include toilets, urinals, showerheads, and faucets. Between 2014 and 2019, noncompliant plumbing fixtures must be replaced in certain circumstances, such as:

1. For building additions that increase floor area by more than ten percent;
2. Improvements or improvements that are greater than \$150,000
3. Remodels/improvements that occur in a bathroom that has noncompliant fixtures;

MPWMD adopted regulations in 2009 to require earlier and more stringent retrofit requirements for Non-Residential Users (Rule 143). Staff is proposing consideration of a similar ordinance for Multi-Family Residential that would require retrofits and certification of compliance by January 1, 2019.

Common Laundry Rooms

In addition to the retrofits required by SB 407, staff would like the Water Demand Committee to also consider requiring replacement of non-efficient clothes washers in common laundry rooms by a date certain. Common laundry rooms were left out of the District's 2014 requirement that all Non-Residential clothes washers be replaced with High Efficiency Clothes Washers.

Coin-operated clothes washers (sometimes free washers) are often found in common areas in multi-family buildings and apartment complexes. These types of multi-user laundry facilities can also be found at college dormitories, motels, mobile home parks, etc. Common area clothes washing facilities provide excellent opportunities for water conservation because the frequency of use for each clothes washer is much greater than in-home machines. While an in-home machine averages only 4 to 6 loads per week, common area machines often wash 20 to 50 loads per week per clothes washer.

Most coin-op washers have a Water Factor rating of 12 to 14 (top loaders); using 35 to 45 gallons per load. Newer water efficient models have a Water Factor rating of 4 to 8; using as little as 12 gallons per load. Water savings projections require frequency of use estimates, and this is difficult data to obtain unless the building owner regularly records accurate “coin counts”. It is seldom the property owner actually owns the clothes washers located in the common areas. These machines are most often owned by vendors known as ‘route operators’; where the property owner receives a portion of the machines’ gross revenues. Any effort to replace the machines with more efficient models requires the cooperation of both the property owner and the route operator that owns the machines.

RECOMMENDATION: The Committee should discuss the concept of a Multi-Family Residential retrofit ordinance and provide direction to staff.

EXHIBIT

None