



**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
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Project Manager Name & Contact Information: David Chandler, Coordinator of Renewable Energy and Conservation
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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

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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 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.

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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

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APPLICATION ATTACHMENTS

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ATTACHMENT 1

SITE Photo



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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

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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.

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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

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