

## FINDING OF NO SIGNIFICANT IMPACT

# East Bay Municipal Utility District WaterSMART Grant – FY11: Water and Energy Efficiency Lawn Conversion Rebate Program

FONSI-11-6

Recommended by:

Date: \_ 2/1/21/2

Natural Resources Specialist Central California Area Office

1 au

Date: 2/1/2012

Melissa Vignau Chief, Resources Management Division Central California Area Office

Approved by:

Concurred by:

unega Date: 2/1/202 Michael R Finnegan

Area Manager Central California Area Office



U.S. Department of the Interior Bureau of Reclamation Central California Area Office In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Mid-Pacific Region of the Bureau of Reclamation (Reclamation) finds that the issuance of a WaterSMART Grant to East Bay Mud Utility District (EBMUD) for their Lawn Conversion Rebate Program (LCRP) is not a major federal action that will significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) for the "East Bay Municipal Utility District WaterSMART Grant – FY 11: Water and Energy Efficiency Lawn Conversion Rebate Program" and is hereby incorporated by reference.

#### Background

Reclamation proposes to disburse WaterSMART grant funds to EBMUD to support the LCRP. The purpose of EBMUD's LCRP is to provide financial incentives to both commercial and residential customers to convert to sustainable, drought tolerant landscapes. The LCRP offers rebates to customers who want to replace high water-using lawns with California native and climate appropriate plants that would provide for water-efficient sustainable landscapes.

#### **Findings**

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

#### Water Resources

The conversion of lawn to California native and climate appropriate plants is expected to reduce the amount of water pumped through the EBMUD distribution system and reduce lawn irrigation run-off water flowing into local creeks and waterways that may contain lawn pesticides, herbicides, and fertilizer. Therefore, there will be a beneficial effect to water resources.

#### **Biological Resources**

The proposed action is the award of funding to EBMUD to remove existing lawns and replacement with climate appropriate species. Federally listed species under the Endangered Species Act are not expected to be on these residential and commercial properties as these areas are highly disturbed. There will be no effect to federally listed species due to the Proposed Action.

#### **Cultural Resources**

There are no known archeological sites in the Proposed Action area and all affected areas are on private property. The proposed activities associated with Reclamation providing funding, thus, will have no potential to affect historic properties.

#### Indian Trust Assets

There are no Indian Trust Assets (ITA) in the action area. There are no known sacred Indian sites that would have their access limited as a result Reclamation granting a WaterSmart grant to EBMUD. Therefore, the Proposed Action does not have a potential to affect ITA or Sacred Indian sites.

1

#### Socioeconomic Resources

There may be temporary impacts to socioeconomics from the LCRP; however, homeowners and businesses will still require landscaping services to maintain their properties. There will still be a need for landscaping services for drought tolerant land coverings and plants. Therefore, there will be no adverse impact to socioeconomics.

#### **Environmental Justice**

There may be a temporary impact to some small-scale landscaping operations; however, it will not disproportionately impact minority and low-income populations. Therefore, there will be no adverse impacts to minority or low-income populations from the Proposed Action.

#### Air Quality

With a reduction in lawns, there will be a corresponding reduction in air pollution from a change in landscape maintenance practices (e.g., leaving leaf litter in place as mulch and/or manual leaf removal). Therefore, there will be a benefit to air quality.

#### Global Climate

With a reduction in lawns, there will be a corresponding reduction in air pollution and greenhouse gas emissions from a change in landscape maintenance practices. Therefore, there will be a benefit to the global climate.

#### **Cumulative Impacts**

The Proposed Action consists of awarding a grant to EBMUD to provide rebates for lawn removal and converting to sustainable low-water-use landscapes. The Proposed Action will not result in cumulative impacts to any of those resources analyzed within the EA.



**Environmental Assessment** 

# East Bay Municipal Utility District WaterSMART Grant – FY11: Water and Energy Efficiency Lawn Conversion Rebate Program



U.S. Department of the Interior Bureau of Reclamation Mid Pacific Region Central California Area Office Folsom, California

# **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# **Table of Contents**

Section 1	1
	ackground 1
<b>1.2</b> Pu	Irpose and Need
	otential Issues
Section 2	Alternatives Including the Proposed Action
	o Action Alternative
<b>2.2</b> Pr	oposed Action
Section 3	Affected Environment and Environmental Consequences 5
<b>3.1</b> W	Vater Resources   5
3.1.1	
3.1.2	Environmental Consequences5
<b>3.2</b> B	iological Resources
3.2.1	
3.2.2	Environmental Consequences7
	ultural Resources7
3.3.1	Affected Environment
3.3.2	
<b>3.4</b> In	dian Trust Assets
3.4.1	
3.4.2	
	ocioeconomics
3.5.1	
3.5.2	
	nvironmental Justice
3.6.1	
3.6.2	
<b>3.7</b> A	ir Quality10
3.7.1	Affected Environment 10
3.7.2	Environmental Consequences 11
<b>3.8</b> G	lobal Climate11
3.8.1	Affected Environment 11
3.8.2	Environmental Consequences11
<b>3.9</b> C	umulative Impacts
Section 4	Consultation and Coordination13
Section 5	List of Preparers and Reviewers14
Section 6	References 14

# **List of Tables and Figures**

Figure 1 East Bay Municipal Utility District Water Service Area General Location Map
Table 1 Special Status Species

This page left blank intentionally.

# List of Acronyms and Abbreviations

APE	Area of Potential Effect
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
$CO_2$	Carbon dioxide
DOI	Department of the Interior's
EA	Environmental Assessment
EBMUD	East Bay Municipal Utilities District
EPA	Environmental Protection Agency
GHG	greenhouse gases
ITA	Indian Trust Asset
LCRP	Lawn Conversion Rebate Program
MSA	Metropolitan Statistical Area
N <sub>2</sub> O	nitrous oxide
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
Reclamation	Bureau of Reclamation
WaterSMART	Sustain and Manage America's Resources for Tomorrow

# Section 1 Purpose and Need for Action

# 1.1 Background

In conformance with the National Environmental Policy Act of 1969 (NEPA), as amended, the Bureau of Reclamation (Reclamation) has prepared this Environmental Assessment (EA) to evaluate and disclose any potential environmental impacts associated with awarding a Sustain and Manage America's Resources for Tomorrow (WaterSMART) Grant for the East Bay Municipal Utility District (EBMUD) Lawn Conversion Rebate Program (LCRP). Reclamation proposes to disburse WaterSMART grant funds to EBMUD to support the LCRP.

The LCRP offers rebates to customers who want to replace high water-using lawns with California native and climate appropriate plants that would provide for water-efficient sustainable landscapes. This purpose of the program is to provide incentives to save water, money, and time for EBMUD customers. The LCRP program assists EBMUD and the community it serves with their goals to conserve water and reduce energy use.

EBMUD serves communities in Alameda and Contra Costa Counties in California (See Figure 1). EBMUD's major function is to provide domestic water service to its more than 1.4 million customers in the East Bay region of the San Francisco Bay Area in parts of Alameda and Contra Costa Counties.

This EA describes the existing environmental resources in the action area; and evaluates the effects of the No Action and Proposed Action alternatives on the resources.

This EA is in compliance with NEPA and Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508).

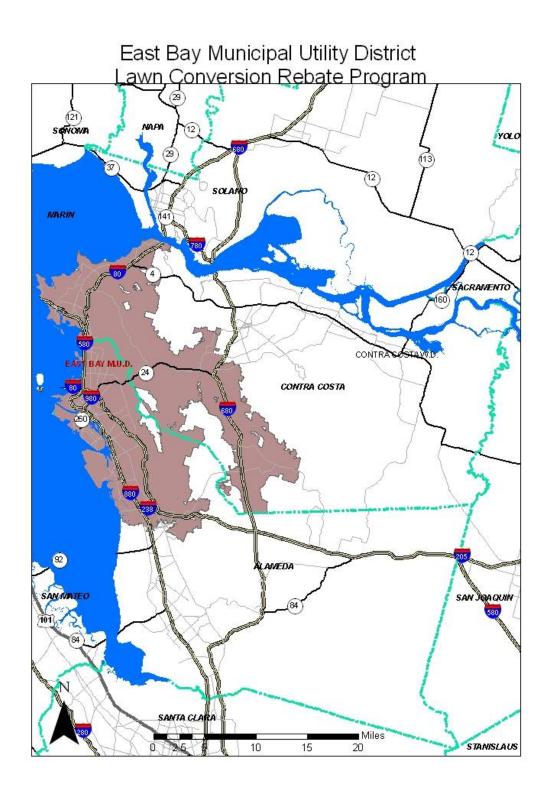


Figure 1 East Bay Municipal Utility District Water Service Area General Location Map

## 1.2 Purpose and Need

The Department of the Interior's (DOI) WaterSMART program establishes a framework to provide Federal leadership and assistance on the efficient use of water, integrating water and energy policies to support the sustainable use of all natural resources, and coordinating the water conservation activities of various DOI bureaus and offices. Through the program, DOI is working to achieve a sustainable water strategy to meet the nation's water needs. With WaterSMART Grants, Reclamation provides cost-shared funding on a competitive basis for on-the-ground water conservation and energy efficiency projects. The WaterSMART Grant Program is under the authority of Section 9504(a) of the Secure Water Act, Subtitle F of Title IX of the Omnibus Public Land Management Act of 2009, P.L. 111-11 (42 USC 10364).

The purpose of the Proposed Action is for Reclamation to further the goals and objectives of the WaterSMART program as they apply to water management operations of EBMUD. Reclamation intends to do so by providing grant funding for the EBMUD LCRP.

The purpose of EBMUD's LCRP is to provide financial incentives to both commercial and residential customers to convert to sustainable, drought-tolerant landscapes. The program offers rebates to customers wanting to replace high water-using lawns with water-efficient sustainable landscapes.

# 1.3 Potential Issues

This EA will analyze the affected environment of the Proposed Action and No Action Alternative in order to determine the potential direct, indirect, and cumulative effects to the following resources:

- Water Resources
- Biological Resources
- Cultural Resources
- Indian Trusts Assets
- Socioeconomics
- Environmental Justice
- Air Quality
- Global Climate

# Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

## 2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not award a grant to EBMUD for the LCRP. It is possible EBMUD would get funding from other sources. If additional funding sources are not available, EBMUD would have to decrease the overall amount of funding for lawn conversion to sustainable, drought tolerant landscapes.

# 2.2 Proposed Action

Reclamation proposes to award a grant to EBMUD for the LCRP. Under the LCRP, EBMUD proposes to provide customer rebates for converting irrigated lawns at residential and commercial sites into landscapes comprised of low-water using California native and climate appropriate plants. The LCRP targets conversion of 800,000 square feet of lawn. Water made available through this conversion effort can then be available for other programs or uses, or for in-stream use or for other water rights holders, or to lessen the need for EBMUD to purchase supplemental supply from other water basins.

The Proposed Action area will include existing disturbed irrigated lawns at residential and commercial sites that qualify for conversion into landscapes comprised of low-water using California native and climate appropriate plants. The LCRP would take approximately 30 months and be completed by January 2014.

# Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the No Action Alternative and the Proposed Action.

## 3.1 Water Resources

#### 3.1.1 Affected Environment

EBMUD captures snowmelt from the Sierra Nevada that flows into the Mokelumne River at Pardee Reservoir. In water years defined as "above normal" and "wet water", the Mokelumne River runoff is sufficient to meet the needs of EBMUD's service area in the San Francisco East Bay region. During droughts and emergencies, the water supply reliability is diminished and a greater burden is placed on EBMUD to provide for its customers. EBMUD's water supply reliability may also be restricted during "below normal" and "dry" water years due to conflicting and or competing needs of senior water rights users on the Mokelumne River and its tributaries.

EBMUD services 20 incorporated cities and 15 unincorporated communities in Alameda and Contra Costa Counties. Approximately 50% of total consumption is single family residential, 17% is multi-family residential, 25% is commercial, industrial and institutional, and 8% is for irrigation-only accounts such as for parks, greenbelts golf courses, and common-area landscaping. Besides a few nurseries, privately owned vegetable gardens, and residential vineyards, there are no commercially irrigated crops within EBMUD service area.

#### 3.1.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award a WaterSMART grant to EBMUD. Without additional funding, EBMUD would have to decrease the overall amount of funding for lawn that could be converted to sustainable, drought tolerant landscapes.

#### **Proposed Action**

The LCRP is projected to improve overall environmental quality because it would replace a water and chemical intensive turf dominated landscape with a sustainable landscape that generate healthy soils and may attract native wildlife. The conversion of lawn to California native and climate appropriate plants is expected to reduce the amount of water pumped through the EBMUD distribution system and reduce lawn irrigation run-off water flowing into local creeks and waterways that may contain lawn pesticides, herbicides, and fertilizer. Therefore, there would be a beneficial effect to water resources.

## 3.2 Biological Resources

#### 3.2.1 Affected Environment

The Proposed Action area would include existing disturbed irrigated lawns at residential and commercial sites that qualify for conversion into landscapes comprised of low-water using California native and climate appropriate plants. The U.S. Fish and Wildlife Service (Service) federally listed species list (Document # 110627044446) was obtained June 29, 2011 from the Service website for the following quadrangles: Dublin, Hayward, San Leandro, Diablo, Walnut Creek, Briones Valley, Oakland East, Oakland West, Las Trampas Ridge, Richmond, San Quentin, Benicia, and Mare Island. In addition, a search was made of the California Natural Diversity Data Based for state listed species. Special status species potentially occurring within the EBMUD boundaries are summarized in Table 1.

Common Name	Species Name	Status
Invertebrates		
Branchinecta conservatio	Conservancy fairy shrimp	FE
Branchinecta longiantenna	longhorn fairy shrimp	FE
Branchinecta lynchi	vernal pool fairy shrimp	FT
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT
Speyeria callippe callippe	callippe silverspot butterfly	FE
Syncaris pacifica	California freshwater shrimp	FE
Fish		
Acipenser medirostris	green sturgeon	FT
Eucyclogobius newberryi	tidewater goby	FE
Hypomesus transpacificus	delta smelt	FT, X, SE
Oncorhynchus kisutch	coho salmon - central CA coast	FE, X
Oncorhynchus mykiss	Central California Coastal steelhead	FT, X
	Central Valley steelhead	FT, X
Oncorhynchus tshawytscha	Central Valley spring-run chinook salmon	FT
	winter-run chinook salmon, Sacramento River	FE, X
Amphibians		
Ambystoma californiense	California tiger salamander, central population	FT, X, ST
Rana draytonii	California red-legged frog	FT, X
Reptiles		
Masticophis lateralis euryxanthus	Alameda whipsnake [=striped racer]	FT, X, ST
Thamnophis gigas	giant garter snake	FT
Birds		
Charadrius alexandrinus nivosus	western snowy plover	FT
		Federal
Haliaectus leucocephalus	Bald eagle	delisted, SE
Laterallus jamaicensis coturniculus	California black rail	SE
Rallus longirostris obsoletus	California clapper rail	FE
Sternula antillarum (=Sterna, =albifrons)		
browni	California least tern	FE
Strix occidentalis caurina	northern spotted owl	FT
Mammals		
Reithrodontomys raviventris	salt marsh harvest mouse	FE, SE
Vulpes macrotis mutica	San Joaquin kit fox	FE, ST
Plants		
Arctostaphylos pallida	pallid manzanita (=Alameda or Oakland Hills manzanita)	FT, SE
Calochortus tiburonensis	Tiburon mariposa lily	FT, ST
Castilleja affinis ssp. neglecta	Tiburon paintbrush	FE
Clarkia franciscana	Presidio clarkia	FE

#### Table 1 Special Status Species

Cordylanthus mollis ssp. mollis	soft bird's-beak	FE, PX
Hesperolinon congestum	Marin dwarf-flax (=western flax)	FT, ST
Holocarpha macradenia	Santa Cruz tarplant	FT, X, SE
Lasthenia conjugens	Contra Costa goldfields	FE, X
Layia carnosa	Beach laia	SE
Pentachaeta bellidiflore	White-rayed pentachaeta	SE
Plagiobothrys diffuses	San Francisco popcornflower	SE
Presidio larkia	Tiburon mariposal lily	ST
Streptanthus niger	Tiburon jewelflower	FE, SE
Suaeda californica	California sea blite	FE

FE: Federal Endangered - Listed as being in danger of extinction.

FT: Federal Threatened - Listed as likely to become endangered within the foreseeable future.

P: Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.

PX: Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.

X: Critical Habitat designated for this species

SE: State Endangered

ST: State Threatened

#### 3.2.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award EBMUD a WaterSMART grant. EBMUD would have to decrease the overall amount of funding available for the LCRP. Lawns within the Proposed Action area would continue to be maintained.

#### **Proposed Action**

Under the Proposed Action, Reclamation would award a WaterSMART grant to EBMUD for their LCRP. Pursuant to the LCRP, EBMUD would remove existing lawns and replace the lawns with planting native Californian and climate appropriate species. While special status species occur within EBMUD boundaries, they are not anticipated to occur on residential and commercial properties as these would be highly disturbed areas. Therefore, there would be no effect to federally listed, proposed or candidate, threatened, or endangered species or designated critical habitat due to the Proposed Action.

### 3.3 Cultural Resources

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the

undertaking will have on historic properties, and consult with the State Historic Preservation Office, to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

#### 3.3.1 Affected Environment

There are no known archeological sites in the Proposed Action area and all affected areas are on private property.

#### 3.3.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award a WaterSMART grant to EBMUD. Without additional funding, EBMUD may not achieve their 2011 LCRP target for conversion of 800,000 square feet of lawn. The water that would have been made available through this conversion effort would not be available for other programs or uses.

#### **Proposed Action**

The proposed activities associated with Reclamation providing WaterSMART Grant funds to EBMUD to expand its LCRP would have no potential to affect historic properties.

## 3.4 Indian Trust Assets

Indian trust assets (ITA) are legal interests in assets that are held in trust by the United States Government for federally recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the interior is the trustee for the United States on behalf of federally recognized Indian tribes. "Assets" are anything owned that holds monetary value. "Legal interests" means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. ITA cannot be sold, leased or otherwise alienated without United States' approval. Trust assets may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITA reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or Executive Order.

#### 3.4.1 Affected Environment

There are no ITA in the action area. No sacred lands listings or information were identified as a result of consulting with Reclamations Mid Pacific Region Indian Trust Asset Branch.

#### 3.4.2 Environmental Consequences

#### No Action

The No Action Alternative does not have a potential to affect ITA. There are no known sacred Indian sites that would have their access limited as a result of this program.

#### **Proposed Action**

The Proposed Action does not have a potential to affect ITA. There are no known sacred Indian sites that would have their access limited as a result Reclamation granting a WaterSmart grant to EBMUD.

## 3.5 Socioeconomics

#### 3.5.1 Affected Environment

EBMUD serves communities in Alameda and Contra Costa Counties in California. The estimated median household income in 2009 for Alameda County is \$68,258 and for Contra Costa County it is \$75,084 (U.S. Census Bureau 2011).

EBMUD services 20 incorporated cities and 15 unincorporated communities in Alameda and Contra Costa Counties. These communities are within the multi-county Metropolitan Statistical Area (MSA).

The California Employment Development Department (EDD) reported more than 300 commercial and residential grounds maintenance operations that have the potential to offer grounds maintenance services to these cities, and range in size from 1 to 249 employees. This industry primarily engages in providing landscape care and maintenance services and/or installing trees, shrubs, plants, lawns, or gardens; the educational requirements for this occupation requires short-term on the job training (California Employment Development Department 2011). The median wage for the Oakland-Fremont-Hayward Metropolitan MSA (Alameda and Contra Costa Counties are within this MSA) is \$29,815, and the 2008-2018 projected employment for grounds maintenance is 31,460 employees.

#### 3.5.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award a WaterSMART grant to EBMUD. Without additional funding, EBMUD may not achieve their 2011 LCRP target. The water that would have been made available through this conversion effort would not be available for other programs or uses. Homeowners and businesses may continue with their current landscaping practices. Therefore, there would be no adverse impact to socioeconomics as a result of the No Action Alternative

#### **Proposed Action**

Under the proposed action, eligible customers could receive a rebate at a rate of \$0.50 per square foot of lawn converted to a sustainable landscape. Limits on maximum rebate amounts, to be determined, will ensure rebates funds are awarded to eligible customers throughout the EBMUD service area. Under the Proposed Action, between 100 and 600 eligible customers could take

advantage of the LCRP. There may be temporary impacts to socioeconomics from the LCRP; however, homeowners and businesses would still require landscaping services to maintain their properties. There would still be a need for landscaping services for drought tolerant land coverings and plants. Therefore, there would be no adverse impact to socioeconomics.

# 3.6 Environmental Justice

#### 3.6.1 Affected Environment

Executive Order 12898 (February 11, 1994) mandates Federal agencies to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.

#### 3.6.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award a WaterSMART grant to EBMUD. Without additional funding, EBMUD would have to decrease the overall amount of funding for lawn that could be converted to sustainable, drought tolerant landscapes. Homeowners and businesses may continue with their current landscaping practices. Therefore, there would be no impact due to the No Action Alternative to minority and low-income populations.

#### **Proposed Action**

The LCRP is open to all customers in the EBMUD service area. Low income or minority members of EBMUD's customer base would not be adversely affected by this program, and would share in the over-all benefits this program brings to individual properties and the entire community.

There may be a temporary impact to some small-scale landscaping operations; however, it would not disproportionately impact minority and low-income populations. There would still be opportunities for upkeep and renovation of existing landscaping and grounds. Homeowners and businesses would still require landscaping services to maintain the beauty and value of their property. Therefore, there would be no adverse impacts to minority or low-income populations from the Proposed Action.

# 3.7 Air Quality

#### 3.7.1 Affected Environment

Alameda and Contra Costa Counties are densely populated areas. Pollution potential is relatively high in these areas (Bay Area Air Quality Management District 2011). Gasoline-powered lawn mowers emit hazardous air pollutants, particle pollution, and volatile organic compound (VOC) emissions. Per Environmental Protection Agency (EPA), the exchange of 1,000 gasoline-powered lawn mowers for electric mowers has the potential of reducing VOC emissions by 9.8 tons per year, which is equivalent to removing 230 cars from highways (EPA 2011a).

#### 3.7.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award a WaterSMART grant to EBMUD. Without additional funding, EBMUD would have to decrease the overall amount of funding for lawn that could be converted to sustainable, drought tolerant landscapes. Air quality in the area would not improve as much had EBMUD been able to accomplish their whole program.

#### **Proposed Action**

Under the Proposed Action, Reclamation would award a WaterSMART grant to EBMUD for the LCRP. Under the LCRP, EBMUD would provide customer rebates for converting irrigation lawns at residential and commercial sites into landscapes comprised of low-water using California native and climate appropriate plants. With a reduction in lawns, there would be a corresponding reduction in air pollution from a change in landscape maintenance practices (e.g., leaving leaf litter in place as mulch and/or manual leaf removal). Therefore, there would be a benefit to air quality.

### 3.8 Global Climate

#### 3.8.1 Affected Environment

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). Some GHG, such as carbon dioxide (CO<sub>2</sub>), occur naturally and are emitted to the atmosphere through natural processes and human activities. The principal GHG that enter the atmosphere because of human activities are: CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sup>2</sup>O), and fluorinated gasses (EPA 2011b).

 $CO_{2}$ ,  $CH_{4}$ , and  $N_{2}0$  can enter the atmosphere through burning fossil fuels (EPA 2011b). Gas powered lawn equipment contribute to the global climate through burning fossil fuels.

#### 3.8.2 Environmental Consequences

#### No Action

Under the No Action Alternative, Reclamation would not award a WaterSMART grant to EBMUD. Without additional funding, EBMUD would have to decrease the overall amount of funding for the LCRP. Under the No Action Alternative, gas powered lawn equipment would continue emitting GHG.

#### **Proposed Action**

Under the Proposed Action, Reclamation would award a WaterSMART grant to EBMUD for the LCRP. Under the LCRP, EBMUD would provide customer rebates for converting irrigation lawns at residential and commercial sites into landscapes comprised of low-water using California native and drought tolerant plants. With a reduction in lawns, there would be a corresponding reduction in air pollution and GHG emissions from a change in landscape maintenance practices. Therefore, there would be a benefit to the global climate.

## 3.9 Cumulative Impacts

According to the CEQ regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Proposed Action consists of awarding a grant to EBMUD to provide rebates for lawn removal and converting to sustainable low-water-use landscapes. The Proposed Action would not result in cumulative impacts to any of those resources analyzed within this EA.

# Section 4 Consultation and Coordination

This EA has been prepared in accordance with the requirements of NEPA. Reclamation is also complying with other applicable laws including the Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.), Clean Water Act of 1977 (16 U.S.C. § 703 et seq.), Clean Air Act of 1970 (42 U.S.C. § 7506 (C)), Endangered Species Act (16 U.S.C. § 1531 et seq.), Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.), National Historic Preservation Act of 1966 (16 U.S.C. § 470 et seq.), Executive Order 11988-Floodplain Management, Executive Order 11990-Protection of Wetlands, and Executive Order 12898-Environmental Justice

# **Section 5** List of Preparers and Reviewers

Patti Clinton, Natural Resource Specialist, CCAO Beth Dyer, Natural Resources Specialist, CCAO Amy Barnes, Archaeologist, MP-153 Patricia Rivera, ITA, MP-400 Peter Vonich, Natural Resource Specialist, CCAO

Mike Hazinski - EBMUD

# **Section 6 References**

Bay Area Air Quality Management District. 2011. Internet Access: http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Bay-Area-Climatology/Subregions/Diablo-Valley-San-Ramon-Valleys.aspx
California Employment Development Department. 2011. Internet Access: http://www.labormarketinfo.edd.ca.gov/aspdotnet/databrowsing/empMain.aspx
Environmental Protection Agency. 2011a. Internet Access: http://www.epa.gov/air/community/details/yardequip\_addl\_info.html
Environmental Protection Agency (EPA). 2011b: Internet Access: Climate Change, Basic Information. <u>http://www.epa.gov/climatechange/basicinfo.html</u>
U.S. Census Bureau. 2011. Internet Access: http://quickfacts.census.gov/qfd/states/06/06001.html
U.S. Fish and Wildlife Service (USFWS). 2011. Species List

#### Clinton, Patricia L

From:Vonich, Peter W.Sent:Monday, June 27, 2011 8:52 AMTo:Clinton, Patricia LSubject:FW: East Bay MUD Watersmart Lawn Conversion Rebate Program (11-CCAO-170)

Hi Patti – fyi

From: Barnes, Amy J
Sent: Monday, June 27, 2011 8:32 AM
To: Vonich, Peter W.
Cc: Overly, Stephen A; Perry, Laureen (Laurie) M; Nickels, Adam M; Bruce, Brandee E; Fogerty, John A; Goodsell, Joanne E; Dunay, Amy L; Williams, Scott A; Soule, William E; Siek, Charles R; Looper, Sheryl A (Sheri)
Subject: East Bay MUD Watersmart Lawn Conversion Rebate Program (11-CCAO-170)

Tracking #11-CCAO-170

Project: East Bay MUD Watersmart Lawn Conversion Rebate Program

Location: Alameda and Contra Costa Counties.

The proposed activities associated with Reclamation providing WaterSMART Water and Energy Efficiency Grant funds to East Bay MUD to expand its Lawn Conversion Rebate Program (LCRP) will have no potential to affect historic properties. The LCRP offers rebates to customers who want to replace high water-using lawns with waterefficient sustainable landscapes. This purpose of the program is to provides incentives to save water, money, and time for customers, while EBMUD and the community conserves water through less use, reducing energy use by pumping less water through the distribution system, and reducing irrigation run-off water containing pesticides, herbicides, and fertilizer from flowing into local creeks and waterways.

As the proposed action has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1), no additional consideration under Section 106 of the National Historic Preservation Act is required.

Thank you for the opportunity to review the proposed action. Please place a copy of this concurrence with the EA administrative record.

1

Amy J. Barnes Archaeologist U.S. Bureau of Reclamation Mid-Pacific Region, MP-153 2800 Cottage Way Sacramento, CA 95825 916-978-5047 <u>abarnes@usbr.gov</u>

#### Clinton, Patricia L

From:	Rivera, Patricia L
Sent:	Monday, June 27, 2011 3:27 PM
To:	Clinton, Patricia L
Cc:	Robbins, Eleanor J (Ellie); Williams, Mary D (Diane)
Subject:	RE: ITA Form for East Bay MUD GrantDiane this is admin so please log in - no further action needed thanks

Patti,

I reviewed the proposed action to award a grant to EBMUD for the LCRP. Under the LCRP, EBMUD proposes to provide customer rebates for converting irrigation lawns at residential and commercial sites into landscapes comprised of low-water using California native and drought tolerant plants. The LCRP targets conversion of 800,000 square feet of lawn. Water made available through this conversion effort can then be available for other programs or uses, or for in-stream use or for other water rights holders, or to lessen the need for EBMUD to purchase supplemental supply from other water basins.

The proposed action does not have a potential to affect Indian Trust Assets.

Patricia