



— BUREAU OF —  
RECLAMATION

# WaterSMART Grants Program

**Finding of No Significant Impact  
and Final Environmental Assessment  
LC-18-24**

**Lower Colorado Basin Region, Boulder City, Nevada**



## **Mission Statements**

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

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.

*Cover photo: Southern Nevada Water Authority Water Smart Landscape Rebate Program (Southern Nevada Water Authority)*

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# Finding of No Significant Impact

(FONSI)

LC-18-24

For

**WaterSMART Grants Program Final Environmental Assessment**

**Boulder City, Nevada**

Based on a thorough analysis of the potential environmental impacts presented in the EA, the Bureau of Reclamation (Reclamation) finds that implementation of the Proposed Action will not significantly affect the quality of the human environment within or adjacent to the project area, therefore an Environmental Impact Statement will not be prepared.

Accordingly, this FONSI is submitted to document environmental review and evaluation of the Proposed Action in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended.

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Recommended: [Signature] Date: 2 Feb 2020  
Manager, Environmental Compliance Group

Approved: [Signature] Date: 2/24/2020  
Chief, Resource Management Office

## List of Acronyms

<b>Acronym</b>	<b>Term</b>
CAA	Clean Air Act
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CWA	Clean Water Act
CWMP	Cooperative Watershed Management Program
DOI	U.S. Department of the Interior
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
Grantee	Eligible applicants granted funding
ITA	Indian Trust Assets
LCBROA	Lower Colorado Basin Regional Office Area
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
Reclamation	Bureau of Reclamation
SECURE	Science and Engineering to Comprehensively Understand and Responsibly Enhance
SSWEP	Small-Scale Water Efficiency Projects
U.S.	United States
WaterSMART	Sustain and Manage America's Resources for Tomorrow
WCFSP	Water Conservation Field Services Program
WEEG	Water and Energy Efficiency Grants
WIIN	Water Infrastructure Improvements for the Nation

## Background

The Bureau of Reclamation (Reclamation) proposes to award funding to eligible applicants through the Sustain and Manage America's Resources for Tomorrow (WaterSMART) Grants Program within the Lower Colorado Basin Regional Office Area. This FONSI incorporates by reference the attached *WaterSMART Grants Program Final Environmental Assessment (EA)*.

The WaterSMART Grant Program categories covered in the EA are:

- Water and Energy Efficiency Grants (WEEG)
- Small-Scale Water Efficiency Projects (SSWEP)
- Cooperative Watershed Management Program-Implementation of Watershed Management Projects (CWMP)
- Resiliency Projects
- Water Conservation Field Services Program (WCFSP)

## Alternatives Considered

A No Action Alternative and the Proposed Action were considered. Under the No Action Alternative, Reclamation will not award one or more of the grants.

### The Proposed Action

Under the Proposed Action Reclamation will provide WaterSMART Grants to Grantee(s) for conservation projects and efficiency incentive programs which fulfill requirements under one or more of the WaterSMART Grant categories (Table 1 in the EA).

All grants proposed under the WaterSMART Grant categories will be reviewed prior to award by a specialist in NEPA compliance to ensure the projects and incentive programs:

1. can be Categorically Excluded under 43 CFR 46.210 or 516 DM 14. In those cases, the appropriate Categorical Exclusion (CE) will be applied  
*or*
2. fall within the scope of the Proposed Action and/or the analysis of this EA.

Upon annual review of all proposed project(s) and/or incentive program(s), the projects will be documented on a project tracking log which will be maintained in the EA administrative record file in the Lower Colorado Basin Regional Office, Resource Management Office, Environmental Compliance Group. If a CE cannot be applied, and the project falls within the scope of this EA and subsequent Finding of No Significant Impact (FONSI), this determination will be documented in a memorandum to the administrative record file. Those projects and/or incentive programs that fall outside the scope of the Proposed Action and/or the analysis of this EA will be further reviewed and analyzed. If appropriate, additional NEPA documentation will be conducted.

The Proposed Action is summarized on pages 3-9 of the EA.

## **Environmental Commitments**

The following measures will be implemented as appropriate as part of the Proposed Action to reduce or eliminate impacts to resources. The measures listed under “General” will be implemented for all projects. The measures listed under “Biological”, “Cultural Resources”, and “Soils” will be implemented for projects that have the potential to impact those resource areas.

### **General**

The Grantee of WaterSMART Grants will be responsible for obtaining and complying with all required Federal, State, County, and City permits for projects and incentive programs.

The Proposed Action will be in accordance with all Federal, state, and local statutes, regulations, and Executive Orders (EO).

Appropriate compliance with environmental laws, including but not limited to the Clean Air Act (CAA), (42 USC 7401 et seq.), Clean Water Act (CWA) (33 USC 1251 et. seq.), Endangered Species Act (ESA) (7 USC 136, 16 USC 1531 et seq.), Migratory Bird Treaty Act (MBTA) (16 USC 703-712), and National Historic Preservation Act (NHPA) (16 USC 470), will be completed for projects.

### **Biological**

Construction, operations and maintenance activities that may affect vegetation will occur outside of the migratory bird breeding season (February 15 to September 1) to the maximum extent practicable. If construction and maintenance activities cannot occur outside February 15 to September 1, a biologist, approved by Reclamation or the Grantee if authorized by Reclamation, will conduct nesting bird clearance surveys. If any nesting bird activity is detected, all activities will cease until the biologist determines that no active nests, eggs, nestlings, or recently fledged birds will be affected.

To prevent the spread of noxious and invasive species, equipment used for projects shall be thoroughly cleaned prior to entering and leaving the project site. The cleaning process will ensure that all dirt and debris that may harbor noxious or invasive species are removed and disposed of at an appropriate facility. Reclamation’s Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species: 2012 Edition should be referenced for inspection and cleaning activities. The manual can be found at:  
<http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf>

### **Cultural Resources**

Potential adverse impacts to Historic Properties will be avoided, minimized, or mitigated through the NHPA Section 106 process.

If during the course of any activities associated with the execution of a project, the Grantee becomes aware of or discovers an architectural and/or archaeological resource, the activity in the vicinity of the resource will cease. The Grantee will secure and protect the resource and notify Reclamation. Reclamation will ensure that the stipulations of 36 CFR Part 800.11 are satisfied before activities in the vicinity of the resource can resume.

## **Soils**

To prevent soil erosion, soil stabilization methods shall be employed during construction activities and any required permits obtained. Soil stabilization methods may vary depending on the project; and should be determined by the Grantees project engineers with consideration of standard practices used in construction.

## **Environmental Impacts and Findings**

Implementation of the Proposed Action will not result in significant impacts to any of the resources evaluated in the EA. There will be no direct, indirect or cumulative impacts to Environmental Justice, Indian Trust Assets, or Water Quality. Minor, insignificant, temporary impacts were identified related to Air Quality, Biological Resources, Cultural Resources including Traditional Cultural Properties and Sacred Sites, Floodplains/Wetlands, Noise, Soils, and Visual Resources.

Beneficial impacts related to overall water savings in the lower Colorado River system were identified. Environmental impacts are summarized on pages 10 to 16 of the EA.



# **WaterSMART Grants Program Final Environmental Assessment**

LC-18-24

Prepared by:  
**United States Department of the Interior**  
**Bureau of Reclamation**  
**Lower Colorado Basin Region**  
**Boulder City, Nevada**

# 1.0 Introduction

## 1.1 Proposed Federal Action

The Bureau of Reclamation (Reclamation) proposes to award funding to eligible applicants through the Sustain and Manage America's Resources for Tomorrow (WaterSMART) Grants Program within the Lower Colorado Basin Regional Office Area \*(LCBROA) (Figure 1). WaterSMART grants are also awarded by Reclamation's Area Offices; this Environmental Assessment (EA) addresses WaterSMART grants administered by Reclamation's Lower Colorado Basin Regional Office. WaterSMART leverages Federal and non-Federal funding to work cooperatively with states, tribes, and local entities as they plan for and implement actions to increase water supply reliability through investments and attention to local water conflicts, as well as water or power delivery authority to undertake projects that result in quantifiable and sustained water savings and support broader water reliability benefits. Working together with stakeholders, WaterSMART provides support in various categories. The WaterSMART Grant Program categories covered in this EA are:

- Water and Energy Efficiency Grants (WEEG)
- Small-Scale Water Efficiency Projects (SSWEP)
- Cooperative Watershed Management Program-Implementation of Watershed Management Projects (CWMP)
- Resiliency Projects
- Water Conservation Field Services Program (WCFSP)

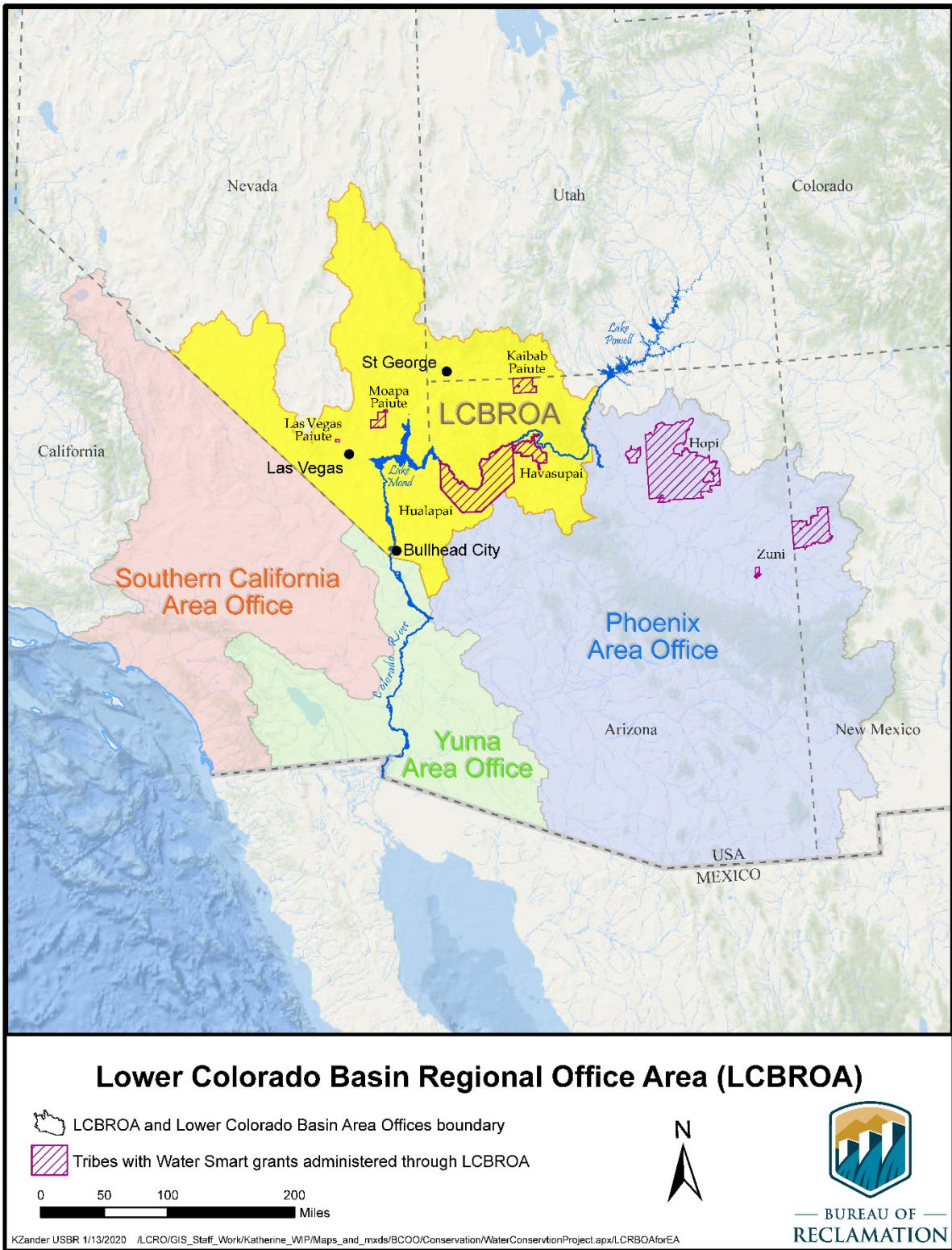
This EA was prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA. The purpose of this EA is to evaluate the potential impacts of the proposed action on the physical and human environment and determine if the impacts will be significant thus warranting the preparation of an Environmental Impact Statement.

## 1.2 Purpose and Need

In 2009, the U.S. Congress passed the Science and Engineering to Comprehensively Understand and Responsibly Enhance (SECURE) Water Act of 2009 (Public Law 111-11, Title IX, Subtitle F), directing the Department of the Interior (DOI) to develop a sustainable water management

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\* On August 22, 2018 DOI reorganized into Unified Interior Regions, one of which is the Lower Colorado Basin Region. Unified DOI Regional boundaries can be found at: <https://www.doi.gov/employees/reorg/unified-regional-boundaries>. The boundaries of the LCBROA shown in Figure 1 differ somewhat from Lower Colorado Basin Region boundaries. The LCBROA boundary reflects current responsibilities for administration of WaterSMART grants, so is used as the analysis area in this EA.



**Figure 1. Map of Reclamation’s Lower Colorado Basin Regional Office Area.**

policy. In 2010, the Secretary of the Interior established the WaterSMART program, combining existing programs with new initiatives to create a broad framework for managing water supplies in the western United States (U.S.). Through WaterSMART grants, Reclamation provides financial assistance to water managers for projects that seek to conserve and use water more efficiently, increase the use of renewable energy and improve energy efficiency, benefit threatened and endangered species, investigate and develop water marketing strategies, prevent any water-related crisis, or otherwise contribute to water supply sustainability in the Western U.S.

The purpose of the Proposed Action is to further the intent of the SECURE Water Act of 2009 and the goals of the WaterSMART program.

This Proposed Action is needed to optimize available water resources because of decreasing water supplies resulting from increasing population and ongoing drought within the lower Colorado River Basin. Eligible applicants who manage water needs and are granted funding (Grantee) under one or more of the WaterSMART Grant Program categories have identified a need to conserve their water supply by developing, managing, and stabilizing water supplies within their service area. Implementation of projects and incentive programs funded through the WaterSMART Grants Program will contribute to DOI's priorities.

The water supply managed by the Grantees is obtained from the watershed systems within the LCBROA. Water conservation in the LCBROA contributes to overall water conservation in the lower Colorado River system.

## **2.0 Description of Alternatives**

### **2.1 No Action Alternative**

Under the No Action Alternative, Reclamation would not award one or more of the WaterSMART Grants addressed in this EA. For the grants not awarded, eligible applicants would not receive funds awarded under the various WaterSMART Grant categories and would need to find other funds to implement the incentive programs. This could delay or prevent implementation of the project. Water savings and financial incentives for water conservation would not occur, therefore not fulfilling the requirements of the SECURE Water Act of 2009 and the goals of the WaterSMART program.

### **2.2 Proposed Action Alternative**

Under the Proposed Action Reclamation would provide WaterSMART Grants to Grantee(s) for conservation projects and efficiency incentive programs which fulfill requirements under one or more of the WaterSMART Grant categories (Table 1).

**Table 1. WaterSMART Grant Program Categories**

WaterSMART Grant Program Category	Description of Category	Eligible Applicants	Recipient Cost Share
Water and Energy Efficiency Grants (WEEG)	<p>Provide funding for projects that result in quantifiable water savings and support broader water reliability benefits that:</p> <ul style="list-style-type: none"> <li>➤ conserve and use water more efficiently;</li> <li>➤ increase the production of hydropower; mitigate conflict risk in areas at a high risk of future water conflict;</li> <li>➤ and accomplish other benefits that contribute to water supply reliability in the western United States.</li> </ul>	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended	50 percent or more of project costs
Small-Scale Water Efficiency Projects (SSWEP)	<p>Provide funding for projects that have been prioritized through planning efforts led by the applicant that:</p> <ul style="list-style-type: none"> <li>➤ conserve and use water more efficiently;</li> <li>➤ mitigate conflict risk in areas at a high risk of future water conflict;</li> <li>➤ and accomplish other benefits that contribute to water supply reliability in the western United States.</li> </ul>	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended	50 percent or more of project costs

WaterSMART Grant Program Category	Description of Category	Eligible Applicants	Recipient Cost Share
Cooperative Watershed Management Program (CWMP)	<p>Implementation of Watershed Management Projects</p> <p>Provide funding for projects that address management needs that:</p> <ul style="list-style-type: none"> <li>➤ support the sustainable development of water resources;</li> <li>➤ improve the ecological resilience of rivers and streams;</li> <li>➤ and conserve water for multiple uses using collaborative conservation efforts.</li> </ul>	<p><b>New Watershed Group:</b> States, Indian tribes, local and special districts (e.g., irrigation and water districts, etc.), local governmental entities, interstate organizations, and non-profit organizations.</p> <p><b>Existing Watershed Groups:</b> In order to be eligible to receive an award for funding as an Existing Watershed Group, the applicant must be an eligible entity as described immediately above for New Watershed Groups.</p>	50 percent or more of project costs
Drought Response Program: Drought Resiliency Projects	<p>Provide financial assistance to water managers to:</p> <ul style="list-style-type: none"> <li>➤ implement projects that will build long-term resiliency to drought (Drought Resiliency Projects).</li> </ul>	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended	50 percent or more of total project costs
Water Conservation Field Services Program (WCFSP)	<p>Provide funding for projects that address management needs that:</p> <ul style="list-style-type: none"> <li>➤ Assist in developing effective water management and conservation plans;</li> <li>➤ Encourage and promote implementation of water efficiency measures;</li> <li>➤ Demonstrate conservation technologies; and</li> <li>➤ Promote and support water education and training.</li> </ul>	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Lower Colorado Basin Region as required by Sections 9502 and 9504(a) of Public Law 111-11.	50 percent or more of total activity costs must be met with non-federal funds.

These grants would allow Grantees to continue water conservation projects and incentive programs which provide annual recurring savings of water from the lower Colorado River system through the provisions identified in the WaterSMART Grant agreements. Water conserved through these Proposed Actions would be used to help meet current and future demands in the face of sustained drought in the lower Colorado River Basin.

The Proposed Action is limited to Projects that may be funded under the WaterSMART grant categories in Table 1 that would involve the following activities (1) testing, installation, repair, replacement, or modification of equipment in existing structures or minor repairs or modifications to existing structures, dams, canals, laterals, drains, pipelines, and similar facilities and/or (2) are confined to areas already impacted by farming or development activities, where work would be considered minor, and where impacts are expected to be localized. The Proposed Action may also include planning, administrative, or outreach activities associated with on the WaterSMART grant categories.

Reclamation's involvement in implementation of Project activities would generally be limited to providing grant funding and ensuring that the terms of the grant are followed. The Grantees would be responsible for Project implementation.

Projects that apply include the following categories:

### **A. Improvement Projects**

Projects that improve the efficiency of municipal, industrial, or agricultural water systems.

Qualifying projects/devices would include but not be limited to:

- 1) Replacement/refurbishment/repair and/or testing of existing wells or water storage tanks;
- 2) Replacement/refurbishment/repair and/or testing of new or existing water pipelines located within the facility;
- 3) Installation of new water pipelines and appurtenances located within the facility boundaries in previously disturbed areas;
- 4) Minor repairs to canals;
- 5) Installation/replacement/upgrading of meters and other water monitoring devices and associated appurtenances;
- 6) Installation of leak detection devices such as noise loggers;
- 7) Installation/replacement/upgrading of efficient and/or alternative power sources and other devices and associated appurtenances located at well sites;
- 8) Smart Water Application Technologies controllers, which monitor weather and other site conditions and adjust the irrigation system to apply the appropriate amount of water for these conditions;
- 9) high-efficiency nozzles (i.e. sprinkler heads);
- 10) pressure reducer valves;
- 11) conversion of irrigation stations to drip irrigation;
- 12) capping irrigation stations;
- 13) installation of water efficient appliances and fixtures in buildings.

All devices/equipment under this category would be installed on existing systems and within existing facility boundaries. A minor amount of excavation within buildings or in previously

disturbed areas may be needed to access or install water lines or other underground components of the water system.

## **B. Rebate Programs**

Grants for rebate programs which provide a financial incentive to:

- 1) encourage residential, commercial, and institutional water users to convert turf to water efficient and desert tolerant landscaping. These program rebates would encourage conversion that would result in a recurring annual water savings.
- 2) encourage residential, commercial, and institutional water users who upgrade their irrigation systems with water saving devices. Qualifying devices would include but not be limited to:
  - a. Smart Water Application Technologies controllers, which monitor weather and other site conditions and adjust the irrigation system to apply the appropriate amount of water for these conditions;
  - b. high-efficiency nozzles;
  - c. pressure reducer valves;
  - d. conversion of irrigation stations to drip irrigation;
  - e. and capping irrigation stations.
- 3) encourage the installation of water saving devices in commercial, industrial, and institutional settings. Examples of qualifying pre-approved water efficient devices/equipment would include but not be limited to:
  - a. Retrofitting plumbing fixtures with WaterSense labeled fixtures which provide water savings and meet the Environmental Protection Agency's specifications for water efficiency and performance;
  - b. Replacing water-cooled machines with air-cooled machines;
  - c. Low water use washing machines.
- 4) encourage the installation of custom technologies based on a performance of the water savings found. Rebates would be provided to commercial customers who institute new water-saving processes or install new water-saving projects. Examples of custom technologies from other water providers would include but is not limited to:
  - a. reducing commercial laundry water usage by installing new tunnel washers that utilize reuse of water;
  - b. and switching from water-based to waterless bottle washing in industrial operations.

All devices/equipment under this category would be installed on existing systems and involve replacing existing system components. A minor amount of excavation within buildings or in previously disturbed areas may be needed to access water lines or other underground components of the water system.



## **C. Outreach Programs**

Implementation of water conservation outreach programs that involve activities that include but are not limited to:

- 1) continuing a rebate program for the purchase of low-flow toilets, pool covers, and recirculation pumps for homes;
- 2) leak detection programs such as those conducted with handheld sonic tests to find leaks in water mains.
- 3) performing water audits in homes throughout the city;
- 4) an outreach publication campaign;
- 5) presenting water programs at the local schools;

## **D. Emergency Drought Actions**

Grants for hauling of water as an emergency drought action. Water would be obtained from an existing water system and delivered using existing roads and facilities.

### **2.2.1 Measures to Minimize Impacts**

The following measures would be implemented as appropriate as part of the Proposed Action to reduce or eliminate impacts to resources. The measures listed under “General” would be implemented for all projects. The measures listed under “Biological”, “Cultural Resources”, and “Soils” would be implemented for projects that have the potential to impact those resource areas.

#### ***General***

The Grantee of WaterSMART Grants would be responsible for obtaining and complying with all required Federal, State, County, and City permits for projects and incentive programs.

The Proposed Action would be in accordance with all Federal, state, and local statutes, regulations, and Executive Orders (EO).

Appropriate compliance with environmental laws, including but not limited to the Clean Air Act (CAA), (42 USC 7401 et seq.), Clean Water Act (CWA) (33 USC 1251 et. seq.), Endangered Species Act (ESA) (7 USC 136, 16 USC 1531 et seq.), Migratory Bird Treaty Act (MBTA) (16 USC 703-712), and National Historic Preservation Act (NHPA) (16 USC 470), would be completed for projects.

#### ***Biological***

Construction, operations and maintenance activities that may affect vegetation will occur outside of the migratory bird breeding season (February 15 to September 1) to the maximum extent practicable. If construction and maintenance activities cannot occur outside February 15 to September 1, a biologist, approved by Reclamation or the Grantee if authorized by Reclamation, will conduct nesting bird clearance surveys. If any nesting bird activity is detected, all activities will cease until the biologist determines that no active nests, eggs, nestlings, or recently fledged birds will be affected.

To prevent the spread of noxious and invasive species, equipment used for projects shall be thoroughly cleaned prior to entering and leaving the project site. The cleaning process will ensure that all dirt and debris that may harbor noxious or invasive species are removed and disposed of at an appropriate facility. Reclamation's Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species: 2012 Edition should be referenced for inspection and cleaning activities. The manual can be found at: <http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf>

### **Cultural Resources**

Potential adverse impacts to Historic Properties would be avoided, minimized, or mitigated through the NHPA Section 106 process.

If during the course of any activities associated with the execution a project, the Grantee becomes aware of or discovers an architectural and/or archaeological resource, the activity in the vicinity of the resource will cease. The Grantee will secure and protect the resource and notify Reclamation. Reclamation will ensure that the stipulations of 36 CFR Part 800.11 are satisfied before activities in the vicinity of the resource can resume.

### **Soils**

To prevent soil erosion, soil stabilization methods shall be employed during construction activities and any required permits obtained. Soil stabilization methods may vary depending on the project; and should be determined by the Grantees project engineers with consideration of standard practices used in construction.

### **2.2.2 Review Process for WaterSMART Grants**

All grants proposed under the WaterSMART Grant categories (Table 1) will be reviewed prior to award by a specialist in NEPA compliance to ensure the projects and incentive programs:

1. can be Categorically Excluded under 43 CFR 46.210 or 516 DM 14. In those cases, the appropriate Categorical Exclusion (CE) will be applied
- or*
2. fall within the scope of the Proposed Action and/or the analysis of this EA.

Upon annual review of all proposed project(s) and/or incentive program(s), the projects will be documented on a project tracking log which will be maintained in the EA administrative record file in the Lower Colorado Basin Regional Office, Resource Management Office, Environmental Compliance Group. If a CE cannot be applied, and the project falls within the scope of this EA and subsequent Finding of No Significant Impact (FONSI), this determination will be documented in a memorandum to the administrative record file. Those projects and/or incentive programs that fall outside the scope of the Proposed Action and/or the analysis of this EA would be further reviewed and analyzed. If appropriate, additional NEPA documentation would be completed.

## **2.3 Alternatives Considered but Not Evaluated in Detail**

The projects and/or incentive programs that would receive funding under the WaterSMART Grants Program meet the criteria for funding under one or more categories of WaterSMART. Because these activities are appropriate for funding, no other alternatives were considered.

# **3.0 Affected Environment and Environmental Consequences**

## **3.1 Affected Environment**

The LCBROA includes approximately 27 million acres (42 thousand square miles) in southern Nevada, Arizona, and southwestern Utah (Figure 1.) The majority of the LCBROA is in the Basin and Range physiographic province, which is characterized by low desert surrounded by north-south trending fault block mountain ranges (Mayer et.al. 2012). A small portion is located within the Colorado Plateau, a physiographic province typified by canyons and plateaus (Fenneman and Johnson, 1946). The climate ranges from arid to semi-arid. The primary drainage is the Colorado River, with primary tributaries the Virgin and Muddy Rivers. There are several perennial washes and numerous ephemeral washes.

The LCBROA includes portions of the following counties: Washington and Kane in Utah; Clark, Lincoln, White Pine, Nye, and Esmeralda in Nevada; Mohave, La Paz, Coconino, and Navajo in Arizona; and McKinley in New Mexico. Land ownership is a combination of Federal, State, Tribal, and private entities. Indian Reservations that Reclamation's Regional Office currently administers WaterSMART grants for are: the Kaibab Band of Paiute Indians, Hualapai Indian Tribe, Havasupai Tribe, Hopi Tribe, Las Vegas Paiute Tribe, Moapa Band of Paiute Indians, and Pueblo of Zuni. There are numerous other Indian Reservations located within the Lower Colorado Basin Region which could be included in Reclamation's Regional Office WaterSMART grant program in the future. Primary cities within the LCBROA are St. George in Utah, Las Vegas, North Las Vegas, Henderson, Boulder City, and Mesquite in Nevada; Bullhead City and Kingman in Arizona, with other smaller communities scattered throughout the area. Most of the communities are located near the Colorado River Valley or tributaries. Irrigated agricultural is primarily located along the Muddy and Virgin Rivers, and on the Fort Mojave Indian Reservation on the Colorado River.

The activities associated with the projects and/or incentive programs granted under one or more of the WaterSMART Grant categories would take place on Federal, State, Tribal or private land. The activities would take place in urban areas either within or in association with existing residential, commercial, or institutional buildings, structures, grounds, or facilities. Activities may also take place on: 1) farms or other lands containing diversions, canals, laterals, other irrigation related facilities, and measurement equipment or 2) in other areas previously impacted by development or other disturbance.

## 1.1 Resources Considered but not discussed Further

The following resources were considered and are not further addressed in this document because they would not be impacted by the Proposed Action.

- Environmental Justice – EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) directs federal agencies to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority and low-income populations. In accordance with CEQ guidance, minority populations should be identified if the minority population in the Proposed Action area “exceeds 50 percent” or if the percentage of minority population in the Proposed Action area is meaningfully greater than the “minority population percentage in the general population or other appropriate unit of analysis” (CEQ 1997). Communities should be identified as “low income” based on the annual statistical poverty thresholds from the U.S. Census Bureau (CEQ 1997).

Due to the types of activities associated with the Proposed Action, no high and adverse human health or environmental effects are anticipated. Implementation of the Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations.

- Indian Trust Assets (ITA) – ITAs are legal interests in property held in trust by the United States for Indian Tribes or individuals. ITAs are those properties, interests, or assets of a Federally recognized Indian tribe or individual Indian over which the Federal government also has an interest, either through administration or direct control. Examples of ITAs include lands, minerals, timber, hunting rights, fishing rights, water rights, in-stream flows, and other treaty rights. All Federal bureaus and agencies are responsible for protecting ITAs from adverse impacts resulting from their programs and activities. Although ITAs may be located within project areas, for example projects may take place on Tribal lands; no adverse impact to ITAs are anticipated because of the minor nature of the Proposed Action.
- Water Quality- Except for minor repairs to canals, the projects included in the Proposed Action would either not take place next to waterways or would not have the potential to discharge pollutants into waterways because of their short term and/or localized nature. If minor repairs to canals are carried out, the Grantee would be responsible for obtaining and complying with any required permits, including but not limited to those required under the CWA. Projects associated with wells, water storage tanks, and water pipelines would require compliance with the Safe Drinking Water Act (Title XIV of the Public Health Service Act) and any other requirements for drinking water supplies. Because of the low potential for projects to impact water quality, and the requirement for the Grantee to obtain and comply with any permits related to water quality, no water quality impacts are anticipated.

## 3.2 Environmental Consequences

Impacts from the Proposed Action would be localized, short-term, and within areas that have previous disturbance or existing structures or facilities. A programmatic analysis of impacts to resource areas that may be affected, along with the reason(s) the resource is being considered, is included below. A more specific analysis of potential impacts of individual projects will be documented in Appendix A when projects are proposed. A determination of whether individual

projects would have significant impacts will be made by considering the resource areas discussed in this EA and any other applicable resource areas as well as the criteria for Extraordinary Circumstances listed in 43 CFR 46.215. Projects which with no significant impacts would meet the requirements for the FONSI. Those which may have significant impacts would require further analysis.

### **3.2.1 No Action Alternative**

Under the No Action Alternative, there would be no impact to resources from the Proposed Action.

The programs and projects may still occur, but without Reclamation funding or involvement. If the programs and projects are insufficiently funded or do not occur, the water savings and financial incentives projected for water conservation would not occur or would be reduced. Projects which allow more water to be retained in the Colorado River and other waterways, potentially benefiting aquatic biological resources, may not occur.

### **3.2.2 Proposed Action**

#### ***Air Quality***

The CAA establishes National Ambient Air Quality Standards (NAAQS). The Environmental Protection Agency (EPA) has developed primary and secondary NAAQS for six criteria air pollutants, including: ground level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide. Hydrographic basins that are currently in violation of NAAQS are classified as non-attainment areas, and new sources to be located on or near these areas are typically subject to more stringent air permitting requirements than similar sources in attainment areas. Hydrographic basins are referred to as “in maintenance” when they have achieved attainment but are subject to a Redesignation/Maintenance Plan to demonstrate that attainment is being maintained.

The potential for air quality impacts was considered because some of the projects would be in areas that are classified as non-attainment, or in maintenance. Improvement Projects which involve replacement, refurbishment, repair, or installation may require the use of vehicles and fuel consuming equipment for travel, transport, and construction activities. Rebate Programs which involve turf conversion, upgrading irrigation systems, or replacing equipment may also require the use of vehicles and equipment. Equipment use may range from passenger vehicles accessing work sites to skid steers, backhoes, or other equipment operating for one to several hours over a one to several day period. Outreach Programs and Emergency Drought Actions would not involve construction but may involve the use of vehicles for site access and delivery.

The construction, access, and delivery activities are expected to be limited in size and scope, and equipment use intermittent and short-term. As a result, impacts to air quality from release of criteria air pollutants during construction or site access and delivery are expected to be minor.

For projects proposed in a non-attainment or maintenance area for at least one criteria air pollutant, the CAA General Conformity Rule would be adhered to (EPA, 2017).

No measurable cumulative impacts are anticipated because of the minor impacts and adherence to the CAA General Conformity Rule.

## **Biological Resources**

The ESA provides protection to species listed as threatened or endangered, or proposed for listing as threatened or endangered. Section 9 prohibits the “take” of any member of a listed species. A definition of “take” under the ESA may be found at: <https://www.fws.gov/endangered/laws-policies/section-3.html>.

The MBTA was enacted to ensure the protection of shared migratory bird resources. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit. More information on the MBTA may be found at:

<https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>. The responsibilities of Federal agencies to protect migratory birds are described in EO 13186.

Numerous laws, including the Federal Noxious Weed Control Act (7 U.S.C 2801 et seq), have been passed to prevent the introduction and spread of invasive species. EO 13751 “Invasive Species”, directs Federal agencies to prevent the introduction of invasive species and to deny authorization or funding of actions that are likely to cause or promote the introduction or spread of invasive species.

Activities would take place in urban areas either within or in association with existing residential, commercial, or institutional buildings, structures, grounds, or facilities or other areas previously disturbed by development. Improvement Projects which involve replacement, refurbishment, repair, or installation may result in ground or vegetation disturbance. Rebate Programs which involve turf conversion or upgrading irrigation systems may also disturb soil and vegetation. Although there may be some disturbance, it would be minor, short term, and localized.

The potential for species listed as threatened or endangered to occur in these areas is low because of the setting of the proposed action. Migratory birds may be present, but the potential for them to be impacted is also low in these settings because of the limited disturbance associated with the Proposed Action. The potential for the spread of invasive species is low, as most projects would take place on facilities where vegetation is maintained.

For the reasons described above, the Proposed Action would not have adverse impacts on any species proposed for listing or listed under the ESA, or on their critical habitat. No impacts are anticipated from Rebate Programs that involve installation of water saving devices in commercial, industrial, and institutional settings or installation of custom technologies, Outreach Programs, or Emergency Drought Actions. Activities which have the potential to have adverse impacts would be outside the scope of this EA, and subject to additional analysis.

Because of the affected environment and minor nature of the Proposed Action, adverse impacts to migratory birds, violations of the MBTA, or the introduction or spread of noxious weeds or invasive species is not anticipated. The biological measures discussed in Section 2.2.1 would be implemented as appropriate and would prevent impacts associated with those projects. No measurable cumulative impacts are anticipated because any direct or indirect impacts would be minor and short-term.

## **Cultural Resources**

Section 106 of the NHPA requires that Federal agencies consider and evaluate the effect that Federal projects may have on cultural resources eligible for or listed on the National Register of Historic Places (NRHP) (Historic Properties) under their jurisdiction. A Traditional Cultural Property is a property or place that is eligible for the NRHP because of its association with the cultural practices or beliefs of a living community that are: 1) rooted in that community's history and 2) important in maintaining the continuing cultural identity of the community.

EO #13007 "Indian Sacred Sites" requires that Federal agencies with legal or administrative responsibility for management of Federal lands, "to the extent practicable permitted by law, and not clearly inconsistent with essential agency functions, to: (1) accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners; and (2) avoid adversely affecting the physical integrity of such sacred sites."

Activities would take place in urban areas either within or in association with existing residential, commercial, or institutional buildings, structures, grounds, or facilities or other areas previously disturbed by development. Improvement Projects which involve replacement, refurbishment, repair, or installation may result in ground disturbance or modification of facilities. Rebate Programs which involve turf conversion or upgrading irrigation systems may also involve ground disturbance.

Because of the minor nature and affected environment of the Proposed Action, it is anticipated that many projects would not have the potential to cause effects to Historic Properties or sacred sites. If potential effects to Historic Properties are anticipated when projects are reviewed, adverse impacts would be avoided, minimized, or mitigated through the NHPA Section 106 process. No impacts are anticipated from Outreach Programs, installation of water saving devices in commercial, industrial, and institutional settings or installation of custom technologies, or Emergency Drought Actions.

Because no adverse impacts are anticipated, there would be no measurable cumulative impacts.

## **Flood Plains / Wetlands**

Federal activities in floodplains and wetlands are guided in part by two EOs. EO 11988 "Floodplain Management" and EO 11990 "Protection of Wetlands" direct Federal agencies to minimize impacts to these resources and restore and preserve the natural and beneficial values served by floodplains and wetlands when acquiring, managing, and disposing of Federal land and facilities, conducting or funding construction, or conducting programs affecting land use.

Improvement Projects or Rebate Programs may be located within the floodplain of the lower Colorado River or other floodplains or near wetlands. Since projects would take place within existing facilities, or in areas already impacted by farming or development, it is not anticipated that new structures would be placed in floodplains or the functioning of floodplains affected. Any projects which could potentially affect a floodplain would be reviewed to ensure compliance with EO 11988.

It is not anticipated that Improvement Projects or Rebate Programs would be in wetlands. However, if there is potential for impacts to wetlands (i.e. canal lining projects), any potential impacts would be avoided, minimized and/or mitigated in accordance with EO 11990 and any requirements under the CWA. No impacts are anticipated from Outreach Programs; installation of

water saving devices in commercial, industrial, and institutional settings or installation of custom technologies; or Emergency Drought Actions because these activities would not involve ground disturbance or construction. No measurable cumulative impacts are anticipated.

### **Noise**

Some of the projects listed in Section 2.2 may generate noise. Improvement Projects which involve replacement, refurbishment, repair, or installation may require the use of vehicles and other equipment for travel, transport, and construction activities. Rebate Programs which involve turf conversion, upgrading irrigation systems, or replacing equipment may also require the use of vehicles and equipment. Equipment use would range from passenger vehicles accessing work sites to skid steers, backhoes, or other equipment operating for one to several hours during the day over a one to several day period. Outreach Programs and Emergency Drought Actions would not involve construction but may involve the use of vehicles for site access and delivery.

The existing noise level in project areas varies. Many of the project areas would be in urban environments where there is already ambient noise from traffic, aircraft, leaf blowers, and other equipment. Turf conversion or irrigation system projects may take place in residential or agricultural areas where there is less ambient noise. Projects which involve equipment use may raise ambient noise levels temporarily. These activities are expected to be limited in size and scope, and equipment use intermittent and short-term. As a result, noise impacts from construction or site access and delivery are expected to be minor. Because impacts would be minor, no measurable cumulative impacts are anticipated.

### **Soils**

Some of the projects listed in Section 2.2 may result in impacts to soils. Improvement Projects which involve replacement, refurbishment, repair, or installation may require soil disturbance. For example, minor soil disturbance may occur if underground components of water systems are accessed. Rebate Programs which involve turf conversion or upgrading irrigation systems may also require soil disturbance. Activities would take place in urban areas either within or in association with existing residential, commercial, or institutional buildings, structures, grounds, or facilities or other areas where soils have been previously disturbed by development. Since this would be minor disturbance, and soil stabilization methods will be implemented as appropriate and any required permits obtained and implemented, this would not impact soil productivity or lead to erosion. Because impacts would be minor, no measurable cumulative impacts are anticipated.

No impacts are anticipated from Outreach Programs and Emergency Drought Actions, installation of water saving devices in commercial, industrial, and institutional settings or installation of custom technologies because these activities would not involve ground disturbance.

### **Visual Resources**

Improvement Projects which involve replacement, refurbishment, repair, or installation may require the use of vehicles and other equipment for travel, transport, and construction activities. Rebate Programs which involve turf conversion or upgrading irrigation systems may also require the use of vehicles and equipment. Outreach Programs, Emergency Drought Actions would not involve construction but may involve the use of vehicles for site access and delivery.

There may be short term impacts to visual resources from vehicles, equipment, and movement of materials. If projects are located along scenic roadways, or near vista points or undisturbed natural



areas, these activities may temporarily lessen the visual quality of the area. These potential impacts would be minor and temporary.

Landscape conversion projects would change the visual appearance of residential, commercial, and institutional grounds from lawn to drought tolerant landscapes. Impacts from this change would be minor because the projects would be limited in scope, and in settings where the visual landscape has already been altered and drought tolerant landscaping is present. Drought tolerant landscapes which incorporate diverse plant structure and color would have a beneficial visual impact. Because impacts would be minor, no measurable cumulative impacts are anticipated.

### ***Water Quantity***

The individual projects and/or incentive programs would be designed to yield water savings and would contribute towards overall goals of water savings and water conservation within the Colorado River Basin, creating potential beneficial impacts to Water Quantity in the LCBROA.

## **4.0 Coordination and Consultation**

### **4.1 Scoping/Public Involvement**

Reclamation conducted internal scoping and review for the EA. The FONSI and Final EA will be posted on Reclamation's web site.

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