

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Department of Agriculture***

Point of Contact: Lauren Henderson
Phone Number: 503-986-4588
E-mail Address: lhenderson@oda.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Examples include:

- *Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).*

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

ODA Will:

- **Develop a statement about water conservation for employees and disseminate the information through staff meetings and posting throughout ODA work areas.**
- **Discuss water conservation at all agency staff meetings (occur twice per year) and at other agency meetings when possible.**
- **Encourage employees to suggest water conservation ideas to the ODA Director's Office.**
- **Place in ODA worksites signage about ways to reduce water usage.**
- **Assignment of agency water conservation to the ODA Safety Committee.**

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

Examples include:

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- *Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)*

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

ODA Contact: Lauren Henderson

ODA Will:

- **Develop a key water conservation message for the ODA website. The message will be tailored for the public but may include information for farmers and ranchers where feasible.**
- **Develop a key message for employees to utilize in their email footer.**
- **Develop outreach materials that can be included with ODA license renewals.**
- **Encourage employees to discuss, where appropriate, what ODA is doing to assist with conservation and our efforts to meet our state goal.**

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.
- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other:

• ***Potential Challenges/Concerns:* The only concern at this point is our ability to make connections with the private owners whom we lease building from.**

• ***Expected Results of Implementation:* Expectations will be that ODA employees have the importance of water conservation integrated into their daily work routines. ODA staff will be proactive in our approach and will attempt to rise to the challenge of meeting the states conservation goals.**

• ***Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:**

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
 - Locate leaks and repair in a timely manner*
 - Meter water sources (*if not already metered*)
 - Institute a meter installation, testing and maintenance/replacement program
 - Other:
- *Potential Challenges/Concerns:* **ODA does not employ maintenance staff – will rely on outside resources/contractors.**
 - *Expected Results of Implementation:* **The performance of a audit will help us establish a usage baseline which will then assist us with meetings the statewide conservation goal.**
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **At this time we do not have adequate data to assess results. We will look at ways to gather information to keep track of our water conservation efforts.**

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other:
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: The ODA has Greenhouses at its Hawthorne Facility. We will study the possibility of installing water efficient systems for those greenhouses.

• **Potential Challenges/Concerns:** ODA will need to evaluate and prioritize investments as some financial resources are dependent upon adequate Other Fund cash balances.

• **Expected Results of Implementation:** Reduce landscape watering in ODA field offices by 25-30% through a reduction in days watered.

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Ontario Field Office- Reduced landscape watering from 5 days to 3 days per week. We are looking at plans to take out the grass area on the side of the building and pave it for increased parking.**

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

• **Potential Challenges/Concerns:** ODA will need to evaluate and prioritize investments as some financial resources are dependent upon adequate Other Fund cash balances.

• **Expected Results of Implementation:** Once issues are identified, they will be retrofitted where possible working through DAS for the Salem headquarters and outside entities for all others.

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: ODA is just beginning to assess these areas.

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: **Review of laboratory procedures for opportunities to conserve water during sample prep processes and cleanup.**

• **Potential Challenges/Concerns:** Laboratory procedures are well defined, and adjustments to those procedures may result in unintended consequences. ODA will need to evaluate and prioritize investments as some financial resources are dependent upon adequate Other Fund cash balances.

• **Expected Results of Implementation:** In this area, there should be opportunities to make improvements and our expectation is we will be able to make small investments to eliminate potential areas of water waste.

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **The Sample prep lab is now turning off water while prepping onions and washing knives to conserve. Hermiston Field Office- plans to purchase a water peeler for contract potatoes that are inspected at the office facility have been cancelled. ODA is in the process of analyzing other type of peelers that do not use water or use less water than the original procurement.**

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: ODA uses laundry services for laboratory employee uniforms.

• **Potential Challenges/Concerns:** **ODA will review the outside laundry service contract but due to biosecurity measures may not be able to obtain much savings in the lab areas of ODA.**

• **Expected Results of Implementation:** **Unknown at this time.**

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None at this time**

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other:

• **Potential Challenges/Concerns:** **The majority of ODA operations are within state owned buildings. ODA will need to work with those state entities to affect change and anticipate having success with that effort. ODA will need to evaluate and prioritize investments as some financial resources are dependent upon adequate Other Fund cash balances.**

- *Expected Results of Implementation:* **Unknown at this time.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **N/A at this time**

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
- vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)

Other:

• *Potential Challenges/Concerns:* **Some of the agency's vehicles must be thoroughly cleaned and sanitized when moving from farm to farm. These are part of biosecurity measures and cannot be modified. ODA will need to evaluate and prioritize investments as some financial resources are dependent upon adequate Other Fund cash balances.**

• *Expected Results of Implementation:* **ODA will utilize the fleet management system to track the effectiveness of reducing water usage in this area. By tracking the data ODA fleet managers will be able to track and meet this goal.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Program Directors have been notified of the need to reduce water usage in our fleet.**

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: **Train ODA staff, particularly those that manage ODA field offices, in water saving activities.**

• *Potential Challenges/Concerns:* **ODA staff are located all around Oregon. It may take some time to provide education to all staff.**

• *Expected Results of Implementation:* **ODA's goal is to have all staff receive some education regarding water conservation/reduction within the next year.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

- If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*
- Other: **ODA will determine if water saving measures in our ODA field offices could have a**

negative affect on our ability to serve customers. Most field office locations are in rural parts of Oregon.

- *Potential Challenges/Concerns:*

j. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

- **Contracted or reduced landscape watering**
- **Cancelled plans to purchased a high water-use piece of equipment**

k. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

- **On file at ODA**

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Department of Aviation***

Point of Contact: Joy Howard

Phone Number: [503-378-2894](tel:503-378-2894)

E-mail Address: joy.b.howard@aviation.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: **Will post signs in facilities to encourage state employees to reduce their non-essential water use.**

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: **Will post water conservation information on agency website as well as at facilities. Will also consider putting water conservation tips/messages on outgoing correspondence. Would appreciate additional information, resources, and outreach materials toward this effort. Please send to agency contact Joy Howard, joy.b.howard@aviation.state.or.us**

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* **Funding to complete all the necessary projects (ex. Low flow faucets/toilets) to reduce water use.**

- *Expected Results of Implementation:* **Reduction in water use.**

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Recently reduced watering agency lawn to 3 times a week versus daily. Results of reduction not measureable yet.**

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. **Source and Conveyance / Distribution System**

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: [Click here to enter text.](#)

- **Potential Challenges/Concerns: None identified.**
- **Expected Results of Implementation: Tracking usage will assist in performance/project goals.**
- **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Recently pulled all the water usage data for agency owned/leased facilities that use water. Will perform quarterly audit to track usage.**

b. **Irrigation and Other Landscaping Elements**

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)

- **Potential Challenges/Concerns: Reduced water usage can lead to areas of dry grass/brush which can be a fire hazard. Will need to monitor closely during dry weather conditions.**

- *Expected Results of Implementation:* **Reduction in water use.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Recently reduced watering agency lawn to 3 times a week versus daily. Results of reduction not measureable yet.**

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* **Funding to complete water saving projects.**
- *Expected Results of Implementation:* **Reduction in water use.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None identified.**

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* **Funding for new appliances.**
- *Expected Results of Implementation:* **Reduction in water use.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None identified.**

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* **None identified.**

- *Expected Results of Implementation:* **Reduction in water use.**

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None identified.**

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* **None identified.**

- *Expected Results of Implementation:* **Reduction in water use.**

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None identified.**

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* **None identified.**

- *Expected Results of Implementation:* **More education about water saving techniques and reduction in water usage.**

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None identified.**

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)

Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* [Click here to enter text.](#)

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

[Click here to enter text.](#)

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Business Development Department***

Point of Contact: Ramona Rodamaker
Phone Number: [503-986-0141](tel:503-986-0141)
E-mail Address: Ramona.rodamaker@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: **We will post signs in our kitchen areas to encourage employees to reduce their non-essential water use, and we will consider indoor and outdoor plants that are low-water use.**

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: **We will highlight the work of clean tech companies that are creating products that conserve water resources. We also contractually require the water service districts/community projects we finance to replace all leaking components of water systems and install water meters in order to promote conservation of water.**

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency Encourage owner to take steps to reduce water use
- Other: **We have spoken to the building owner (PGE), and they assured us that they have achieved Gold-level certification in the Leed Existing Buildings Operations and Maintenance category. This means that they are already excelling in green building leadership. They achieved this status, in part, by installing low flow valves and faucets throughout the complex already.**

• *Potential Challenges/Concerns:* **Business Oregon does not have a lot of direct control over water usage in our two facilities; however, we will cooperate with the two landlords as they implement water conservation programs.**

• *Expected Results of Implementation:* **Any impact Business Oregon will have on this specific goal will be minor and through promotion and communication of the concepts contained in the Executive Order. We will likely have difficulty making a measurable difference in actual water consumption.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **We have spoken with our landlord in Portland, and PGE has committed to continue to work toward their corporate water conservation goals and to help implement the Executive Order. And, Business Oregon's contracts with water districts already contain requirements to reduce water system leaks and promote means for communities to monitor their water usage.**

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Oregon Department of Corrections*

Point of Contact: Chad Naugle
Phone Number: [503-373-7544](tel:503-373-7544)
E-mail Address: Chad.E.Naugle@doc.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
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Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: DOC has provided awareness to all employees about the EO and strategies DOC has taken over the past few years. There will be further awareness strategies taken by the institutions to have green teams and Physical Plants active in educating staff and adults in custody through newsletters. Drought/water conservation fact sheets from the OWRD website and other determined resources will be posted on employee breakrooms, kitchen areas, bathrooms and adult in custody housing unit activity/information boards.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: DOC will provide OWRD resource links on our web page. Institutions that are able will display OWRD resource fact sheets to read and will provide drought/water conservation videos for visitors to watch (where available).

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency Encourage owner to take steps to reduce water use

- Other: Plan will have staff and adults in custody be mandatory reporters of leaks and establish work order hot line for leaks discovered.

- *Potential Challenges/Concerns:* None

- *Expected Results of Implementation:* Reduce water usage and waste and cost savings in some cases.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Reduced watering exterior landscaping, no car washing or as needed for safety reasons, low flow shower heads, water saving devices on toilets (if no negative impact to older facility), drip systems being installed for garden areas, and experimenting with waterless urinals. Institutions implementing work order system to prioritize water leaks, hotlines and on-call physical plant staff for after hours. Savings to be determined after baseline established.

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

Perform an audit of indoor and outdoor uses on a monthly or quarterly basis

Locate leaks and repair in a timely manner*

Meter water sources (*if not already metered*)

Institute a meter installation, testing and maintenance/replacement program

Other: DOC has two facilities (OSCI and SCI) that are shared with DPSST. There is no accurate way to meter individual institution usage and is currently monitored through Santiam Water Control District. I believe it is currently determined by inmate population at each site. Currently OSCI pays for all of SCI's water usage from their budget. Need to install meters for areas with water rights.

• *Potential Challenges/Concerns:* DOC has many aging facilities with older water infrastructure/supplies. There is difficulty in repairing based on how constructed and unfunded liability. Concerned that not all DOC's water rights are accurately reflected in the OWRD data tool from discussions with managers at the facilities that enter data. Would like to meet with OWRD and DAS representatives to discuss our water rights and leases that were signed before EO came out for water that will be used by a farmer and a company in Ontario (SRCI water rights) starting 2016. This water rights consumption will not be accounted for 2014 baseline. DOC is not budgeted for water meter installations for various water rights throughout the state.

• *Expected Results of Implementation:* Nearly all water consumption (domestic only) has been entered into the energy Portfolio Manager back to 2013. SCI has no usage entered due to shared resource with OSCI. Expect to get better data on usage from water conservation efforts when custom reports are generated from the Portfolio Manager.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Please see section 2 for more actions completed. Based on a custom generated report from Portfolio Manager, water usage from July 31, 2014 to July 31, 2015 reflects a savings of water usage. DOC has conserved 440,265 kgal of domestic water at our facilities.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: Converting gardens areas to drip irrigation to conserve water.
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: Institutions are researching ways to collect rainwater, reclaimed water and grey water retrofits. Prisons will remain watering inside the perimeter adult in custody lawns for safety reasons. All exterior lawns and landscaping have been curtailed except for OSP's Veteran Memorial area.

- **Potential Challenges/Concerns:** Some institutions (due to location) have a substantial amount of dust/dirt that collects in their filters of the air handling units (HVAC). Without routine preventative maintenance (pressure washing filters and equipment) it will result in additional resources to clean, increase costs for HVAC equipment services and replacement of equipment. Institutions need to find alternative landscaping for dead grass areas and other landscaping plants.

- **Expected Results of Implementation:** Reduce water usage and waste and cost savings in some cases.

- **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: Please see section 2 for more actions completed. Drip irrigation is replacing normal irrigation for gardens, conservation programs for habitat restoration and endangered species (sagebrush for sage grouse habitat, milkweed, viola, Kincaid's lupine and golden paint brush for endangered butterflies and protected habitats).

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- **Potential Challenges/Concerns:** This can be a challenge in a correctional environment. DOC is implementing shower schedules for the adults in custody at various facilities that can accommodate. Shower length of times and restrictions could cause inmate unrest. If implemented agency-wide, it could cause sanitation and health issues concerns. There would be an increase of complaints to institution's administration and Communication Office.

- **Expected Results of Implementation:** Reduce water usage and cost savings.

- **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: DRCI has installed ultra-low flow shower heads on one unit and will replace one unit at a time every month. Low flow systems already in place: Urinals 1 gpm,

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water closets 1.6 gpm, and pre-rinse stations at 1.25 gpm. TRCI has low flow shower heads and routine inspections done for shower and restroom leaks. CCCF has aerators, low-flow shower heads and toilet timers installed. Dry mopping procedures are in place and mopping only used for safety and sanitation purposes. Please see section 2 for more actions completed.

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e.*, dishwashers, pre-rinse spray valves, ice machines, etc.) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- *Potential Challenges/Concerns:* Due to large populations in small areas, sanitation levels will need to be maintained. Kitchen staff will need to ensure the adults in custody are not bypassing the low flow head in kitchen by using garden hoses for cleaning purposes.

- *Expected Results of Implementation:* Reduce water usage and cost savings.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Several institutions have removed dishwashers from kitchens and installed two-3 bay sinks for hand washing dishes. DRCI installed a recirculating pump system; there is no need for instant hot water dispensers. TRCI is not replacing ice machines on housing units as they become inoperable. Please see section 2 for more actions completed.

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other:

- *Potential Challenges/Concerns:* Cost to replace existing machines with high efficiency/commercial grade machines.

- *Expected Results of Implementation:* Reduced water usage and maintenance costs.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Please see section 2 for narrative.

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing

Other:

- *Potential Challenges/Concerns:* Costs to retrofit, staff time and increase TSS/BOD surcharges for higher PH levels going to sewer by conserving water. Updating older facilities with low flow devices for toilets would cause major clogs in older infrastructure, maintenance costs for staff time and replacement of equipment.
- *Expected Results of Implementation:* Reduce water usage and cost savings.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Please see section 2 for more actions completed.

g. Equipment Maintenance

Reduce vehicle washing by 50% (or eliminate), **except** for:

- vehicles washed in a facility using recycled water
- vehicles that must be washed to maintain public health and safety
- vehicles that must be washed to prevent the spread of invasive species
- vehicles that must be washed to prevent rusting or other maintenance issues
- vehicles washed only with cleaning agents (i.e., no water)

Other:

- *Potential Challenges/Concerns:* HVAC maintenance, service and equipment replacements would increase without preventive maintenance with power washing units and cleaning filters. Water will be on as need basis only.
- *Expected Results of Implementation:* Reduce water usage
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Vehicles are only washed when needed for safety reasons. If washing needed for Salem vehicles, will use DAS motor pool washing station that uses recycled rinse water. Please see section 2 for more actions completed.

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions

Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions

Other: One institution made a video with adults in custody doing skits around recycling, water and energy conservation. It will be displayed on TV for the adults in custody to watch.

- *Potential Challenges/Concerns:* Need more resources such as videos and maybe an in-service training module for iLearn to make it required training for all staff. Reference in sustainability induction program for new employee orientation.
- *Expected Results of Implementation:* Awareness and reduction of water usage
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Videos being shown at one facility for inmates and visitors at Facility Access. Reached out to OWRD for more videos to use as a resource for all facilities to utilize for visiting rooms and housing units for inmates education/awareness.

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve

water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*

Other: If shower schedules put in place agency-wide, adults in custody will receive minimum 3 showers a week as required by law. Currently, some facilities are limiting showers to 3-5 minutes, allowing those whose work assignments require more frequent showers to happen, individuals with documented medical needs have no restrictions and to protect the health and safety of the inmate, other inmates and staff. Agency will be mindful of volunteer services to adults in custody so there is no impact or it is minimal.

• *Potential Challenges/Concerns:* Could increase inmate unrest and staffing challenges to enforce stricter schedules. Staff time and additional costs to cover, changes in facility schedules, and impact to operations would be a challenge/concern in a correctional environment. There could be an increase of complaints to the Communications Office and administration at the facilities.

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions; please provide a narrative on those achievements here. Here is a list by facility of best practices for water conservation:

Coffee Creek Correctional Facility (CCCF): Replaced shower heads to 1.5 gallons per minute (gpm) in the medium and installed .5 gpm faucet aerators in minimum. Flush timers installed for majority of medium (prevents multiple flushing to conserve water). Stopped irrigating and watering of exterior landscaping. Removed majority of grass in minimum and replaced with gardens. CCCF installed 1.5 gallon flushometers in the minimum. Reduced laundry usage to unit orderly use only. Established dry mopping procedures instead of regular mopping several times a day. Staff and inmate green teams made a video to share with inmates on water conservation ideas on housing units, individual inmate cells and work assignments.

Columbia River Correctional Facility (CRCI): Switched out one unit to waterless urinals. Flush timers and valves installed. Shower schedules implemented. Drip irrigation established for garden.

Deer Ridge Correctional Institution (DRCI): Decreased landscaping watering by two-thirds and only happens in the evening. Half of outside gardens have been converted to drip system. Only washing vehicles on a as need basis. DRCI installed .5 gpm faucet aerators and urinals at 1 gpm. Also, installed 1.5 gpm shower heads in one unit. Every month DRCI plans on changing out another unit to the 1.5 gpm shower heads. In addition, installed 1.6 gpm aerators in janitor closets with water source and pre-rinse dilution centers have 1.25 gpm aerators installed. DRCI is conducting bi-monthly chase checks for water leaks.

Eastern Oregon Correctional Institution (EOCI): Ice Machines: As part of EOCI's ice machine replacement project to replace 31 water-cooled ice machines throughout the Institution, they ordered and have replaced two this year to start. The remaining machines will be purchased, as funding becomes available. These air-cooled ice machines will save an average of 480 gallons of water per machine per day, which would be a total of 5,431,200 gallons per year, all machines combined. This will also reduce EOCI's sewer/water rates. **Lawn & Gardens:** For the 2015 vegetable growing season, EOCI increased their growing space 20% by reducing our current lawn area. By converting lawn to garden space, it will reduce the amount of water needed for

irrigation by up to 11%. Also, they are in the process of scheduling the time to aerate lawns for better water saturation efficiency and root health.

Mill Creek Correctional Facility (MCCF): Restricted all overhead watering. No sprinkler water usage after 10:00 am. Began watering landscaping plants by hand and not after 10:00 am. Installed drip irrigation for gardens. MCCF replaced all shower heads with low flow heads and dorm sink faucets with low flow aerators.

Oregon State Correctional Institution (OSCI): Replaced shower valves and heads to use less than 1.5 GPM per head. Removed food waste grinders in kitchen and sending food waste to composting system at Coffin Butte landfill. Began watering outside apple orchard with watering tubes instead of sprinkler irrigation. Plum orchard is not irrigated. Corrected condensate return system issues to return higher percentage of steam condensate to feed water system in boiler plant. Constructed steam trap repair station in boiler plant to reduce steam generation, thus, increasing overall efficiencies resulting in less water consumption. Installed and utilize timed irrigation system within the green house. Have purchased and partially installed electric motorized control valves for timed showers in housing units four and eleven. Electrical connection will be in place in the near future. Have replaced 80% of the water cooled ice machines with air cooled machines throughout the facility. OSCI installed 1.5 gallon flush style toilets in staff bathrooms. Currently wash fleet vehicles once per month now.

Oregon State Penitentiary (OSP): Restricted all overhead watering. No sprinkler water usage after 10:00 am. Is now watering landscaping plants by hand and not after 10:00 am. Installed drip irrigation for crops.

Oregon State Penitentiary Minimum (OSPM): All automatic sprinklers shut off for landscaping. Stopped watering exterior landscaped areas. Hand watering garden as much as possible.

Powder River Correctional Facility (PRCF): Water adult in custody recreation yard area only 3 days a week verses every day. Replaced shower heads with low flow shower heads. Shortened shower time and implement inmate behavior changes regarding shower times. Wash state vehicles once a month or as needed. Currently using well water for irrigation needs verses city water. Replace mainline entering the facility to correct leak last year.

Santiam Correctional Institution (SCI): In the past two years has converted 38 out of 40 inmate toilets from 3.6 gallons per flush to 1.5 gallons per flush. The cooling/misting towers in the yard (3 total) used to run constantly so the adults in custody could cool off in the summer have been modified with pull chain timed valves, therefore the adults in custody can cool off as needed and they don't run all day. Repaired 9 water hoses which were leaking or damaged. Replaced all the shower heads with water saver heads. Watering garden only as needed. Turned off water outside the institution. Washing vehicles only as needed. Watering shrubs and flowers only as needed. Staff monitoring water waste by adults in custody in housing units and work assignments.

Shutter Creek Correctional Institution (SCCI): Monitoring shower times for inmate use. Watering flower beds only, no lawns. Limited washing of state vehicles, only when necessary. Installed low-flow shower heads in two dorms

Snake River Correctional Institution (SRCI): Irrigation hours at SRCI are set between 8 pm and 4 am for interior inmate yard. Replaced shower heads to 1.5 gpm and all faucets to .5 gpm. Flush valves have been installed to decrease water usage in toilets. Timers installed on toilet flush valves to prevent multiple flushing to conserve more water. Complex 2 and Complex 3 flush timers are set at one minute. Special Housing Units flush timers are set at one minute and timer set for secondary flush is 15 minutes later. Unable to modify Complex 1 due to the type of controls in that area. All Showers at SRCI are metered as low as possible without creating sanitation concerns. SRCI is using drought tolerant plants for landscaping. Exterior irrigation

reduction is in place. SRCI commenced a clothing reset project in 2015. Security staff and OCE combined forces and completed a shakedown of the entire facility for extra inmate clothing. The goal of this reset was to reduce the amount of clothing the inmates had in their possession, reduce clothing costs and reduce wasted water for laundering extra clothing. Here is the results of the gallons of water used prior to the clothing reset (March 2014 to May 2014) and after the clothing reset (March 2015-May 2015). This is what was calculated for 2014: March: 80,514 lbs. laundered; 529,759 gallons of water used. April: 94,447 lbs. laundered; 605,905 gallons of water used. May: 87,724 lbs. laundered; 571,040 gallons of water used. Here is the 2015 clothing reset calculations: March: 77,476 lbs. laundered; 489,135 gallons of water used. April: 77,050 lbs. laundered; 517,705 gallons of water used. May: 71,718 lbs. laundered; 477,650 gallons of water used. There was 222,214 gallons less water used during the above three months.

Two Rivers Correctional Facility (TRCI): Stopped watering exterior lawn areas. Converting several exterior lawns to rock gardens. Watering plants and flowers on drip system. Stopped using water hoses and routine pressure washing of exterior walls and windows. Will not replace ice machines on housing units as they become inoperable. Routine inspections of shower and restrooms for leaks. Increased preventive maintenance of ECU/HVAC roof units to ensure bi-pass valves are functioning correctly to reduce the waste of water.

Warner Creek Correctional Facility (WCCF): Garden watering system converted from sprinklers to drip tape. Watering of facility landscaping is done by hand. Watering of facility adult in custody yard is completed at night to minimize evaporation. Progressive action to solve facility leaks. Inside facility garden (3/4 acre) discontinued. Educating visitors from Facility Access with videos on water conservation.

Oregon Correctional Enterprise Laundry Services @ OSP: Commercial washing machine tunnel #1 has been modified to include a water re-use system. In this case OCE re-uses the water from the press for wash down in pocket #1. This has given OCE a water savings of 600 gallons an hour, 8,400 gallons a day and 2,016,000 per year just on that one tunnel. Tunnel #2 was purchased in 2012, and as it operates it uses 640 gallons per hour, 8,960 gallons per day and 2,150,400 gallons used in one year. This is a difference of 4,000,000 gallons a year between tunnel #1 and #2. OCE's goal is to replace tunnel #1 in the next upgrade, which could add another 4,000,000 gallons saved annually in savings just with tunnel washers. OCE currently has 3,450# washing machines that were tied into water re-use system during their last upgrade in 2012. This system captures the last rinse cycle on all of the washes except mainline due to the dye in the water. Each washer sends 4,658 gallons to the re-use system daily. This total annually between all 3 washers is 3,354,000 gallons of water re-used instead of fresh water. If you add all together, the approximate savings per year of water is 9,370,000 gallons per year, and will increase by approximately 4,000,000 when OCE adds the second new tunnel.

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Department of Administrative Services*

Point of Contact: Randy Gengler
Phone Number: [503-378-2381](tel:503-378-2381)
E-mail Address: randy.gengler@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: DAS will post notices in restrooms, kitchenettes, custodial closets, Salem Motor Pool fuel island, etc. to encourage everyone to reduce non-essential water use in all DAS owned or operated buildings.

Examples include:

- Signs in facilities to demonstrate how to reduce non-essential water use. (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: DAS will post notices in the buildings conveying the necessity for water conservation to the public visiting our buildings. DAS will also post a water conservation link on its website that takes them to the drought.oregon.gov website.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* It will be relatively easy to communicate water conservation within the DAS owned buildings, and to make changes as detailed in Part B below. The challenge will be with private owned buildings. DAS Real Estate Services will be working with all building owners who lease to the state, asking them to reduce non-essential water consumption. However, there is no way to mandate compliance.

• *Expected Results of Implementation:* The reduction for building usage will be gradual over time. Communication to tenants should reduce some consumption, but the majority of the savings will come from upgrading the faucets and toilets to high efficiency models. These upgrades will be gradual over several years due to funding limitations.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

1. Our custodial staff began reducing all non-essential water use while performing their duties.
2. Communication went out on August 20, 2015 to all DAS building tenants requesting their participation in reducing all non-essential water consumption.
3. DAS Real Estate Services has drafted a letter to all private building owners who have leases with the state requesting reduction of non-essential water usage; on October 1, 2015, the letter will be sent.
4. Real Estate Services is in discussions with DOJ to insert language into all new state leases with private building owners requiring them to reduce non-essential water usage.

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* DAS owns three wells used for irrigating the Capitol Mall grounds. One well has a mechanical meter that we have confidence is providing accurate readings, while the other two wells have digital meters that may not be accurate. These meters must be calibrated to be sure their data is accurate. Due to possible inaccuracy, it may be difficult to determine an accurate baseline for our irrigation water usage. Monitoring our main line irrigation system for leaks may be done by watching the pressure in the system; ensuring it does not decrease when water is not being used. This may not be 100% accurate, but should identify any moderate leaks.

• *Expected Results of Implementation:* Once the two meters are calibrated, we will have accurate well water monitoring to document conservation efforts.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

1. Inspected the meters on all three wells; plan to have two of them calibrated.
2. Conducted leak monitoring of the well pressurized system.
3. Our landscape irrigation specialist performs weekly irrigation audits to monitor appropriate water usage, leak prevention and coverage issues.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)

• **Potential Challenges/Concerns:** Currently, contractors service all DAS buildings outside of Salem. We are dependent on them to program irrigation controllers to conserve water, which we have instructed them to do. However, we do not have the prior settings, so it will be hard to verify full reductions have occurred.

• **Expected Results of Implementation:** Conserve irrigation water as much as possible without compromising the health of shrub or tree assets.

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result:

1. Beginning August 7, 2015, DAS reduced irrigation schedules on the Capitol Mall by 25% for all lawn areas (excluding the sand based soil area directly over the underground parking structure) and by 15% in all bed areas. Irrigation of these areas begins in May and continues through September of each year; our reduction will be 15% for two months for 2015. The reduction in water use will be approximately 2.4 million gallons.
2. Instructed our landscape contractors for all DAS buildings off the mall to reduce watering by the same amounts.
3. Our irrigation controller uses the weather to adjust the watering need for the next day and adjusts automatically. The manufacturer claims a 30% water reduction over the standard timer-only irrigation controls.
4. Our landscape irrigation specialist performs weekly irrigation audits to monitor appropriate water usage, leak prevention and coverage issues.
5. Identified the 550 Capitol Street building (formally known as Public Utilities Commission) for a landscape renewal project, installing a completely drought-resistant landscape.

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

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- *Potential Challenges/Concerns:* The largest challenge is the lack of labor to inspect all facilities. Another challenge will be upgrading fixtures to high efficiency models. DAS will need to fund this over several years.
- *Expected Results of Implementation:* Expected water usage reduction at Portland State Office Building and the Human Services Building once the actions are implemented.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Staff have conducted a building audit at the Portland State Office Building with the City of Portland Water Bureau. They identified several action items to implement to reduce water use. i.e. installing low flush toilets, low flush urinals, low flow faucet aerators, low flow shower heads, etc. Funding for these items are being sought, so our intention will be to change them out within the year. Similar changes are being scheduled at the Human Services Building in Salem. These are two of our largest buildings, and will have the greatest impact.

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (i.e., dishwashers, pre-rinse spray valves, ice machines, etc.) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* The largest challenge is the lack of labor to inspect all facilities.
- *Expected Results of Implementation:* Expected water usage reduction at Portland State Office Building and the Human Services Building once the actions are implemented.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Staff have conducted a building audit at the Portland State Office Building with the City of Portland Water Bureau. They identified installing low flow faucet aerators. Funding for these items are being sought, so our intention will be to change them out within the year. Similar changes are being scheduled at the Human Services Building in Salem. These are two of our largest buildings, and will have the greatest impact.

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (except as necessary for health and safety purposes)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* The Custodial program launders all rags and mops used by our custodians. Due to health concerns, there will not be a reduction in the frequency of the washings.
- *Expected Results of Implementation:* Less water being used.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Our previous washing machine was replaced with a high-efficiency machine. The program switched from using cotton rags/mops to using micro fiber, which

allows more rags to be washed in one load; reducing the number of loads and amount of water used. Only full loads are run.

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* Annually, we wash the windows of our buildings; we use water to do this. However, the contractor uses a bucket of water and a squeegee, rather than spraying the window with a hose.

• *Expected Results of Implementation:* Reduced consumption of water due to the actions taken.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

1. Delayed washing windows at all DAS buildings until April 2016 (originally scheduled summer of 2015). Contractor to use buckets of water with a squeegee rather than a hose.
2. We have minimized power washing of parking lots to only what is needed for safety issues; we sweep or blow the other lots with air.
3. Power washing of sidewalks was delayed until next year. Only sidewalks that need to be cleaned due to safety concerns will be washed.

g. Equipment Maintenance

- Reduce vehicle washing to an as-needed basis **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* [Click here to enter text.](#)

• *Expected Results of Implementation:* [Click here to enter text.](#)

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: The Salem Motor Pool car wash recycles its water, but to conserve more, they have reduced the frequency of washing the daily rental pool vehicles. They have also asked agencies to reduce washing of their vehicles.

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: City of Portland, Water Bureau

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- **Potential Challenges/Concerns:** Conversations are ongoing with maintenance, custodial and landscaping staff to conserve water; ideas have been discussed. No formal training has occurred, but will have staff attend when it becomes available.
- **Expected Results of Implementation:** Water reductions once devices are replaced in buildings (based on the findings from the audit with the Portland Water Bureau).
- **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: Our DAS Energy Analyst is heavily involved in investigating ways of conserving water. The City of Portland and City of Salem have been approached to discuss services they offer to assist building owners with this.

i. *Underserved Communities*

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* All DAS landscape contracts are with QRF firms, who may be categorized as a underserved community. Before implementing our water reductions, discussions were conducted to determine if this might affect their work or overall contract requirements. So far, these reductions have not had a negative impact on their work or affected their contract monthly payments.

Other: [Click here to enter text.](#)

- **Potential Challenges/Concerns:** None at this time.

1. *Share Your Achievements - Conservation and Curtailment Actions in 2015*

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions. Please provide a narrative on those achievements here.

The Department of Administrative Services has worked to conserve water by changing behaviors, utilizing new technologies and working with partners both inside state government and within the communities we serve.

As the caretaker of state grounds on the Capitol Mall, DAS has realized significant reductions in water use by reducing the irrigation schedule by 25% for lawns and 15% for planting beds – saving millions of gallons each season. Beyond simply watering less, we are watering smarter. The master controller that controls the sprinklers automatically adjusts to changes in the weather – meaning no sprinklers on rainy days. Overseeing it all is an irrigation specialist that performs weekly inspections on the system and the grounds to check for leaks and coverage issues, and ensure appropriate water usage.

On the facilities side, DAS is working with tenants of state-owned buildings and owners of buildings leased by state agencies to conserve water. For leased space, we're asking building owners to curtail non-essential water usage, and working with Oregon DOJ to insert language requiring curtailment in future leases.

In state owned buildings, we've asked occupants to reduce all non-essential water use. Our maintenance staff is also modeling that behavior. Custodial staff have reduced water use where possible, we've delayed window washing, and power washing of sidewalks and parking lots when sweeping will suffice. We're also

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in the process of installing low flow plumbing fixtures, a high efficiency washing machine, and drought tolerant landscaping in several of our largest buildings.

2. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

See table on the following page.

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#	Building	Location	Water Usage
1	550 Capital St Bldg Well	Salem, on Cap Mall	Irrigation well used to irrigate the entire capital mall area, water rights
2	Adolphson House	Salem, on Cap Mall	Interior only, city meter
3	Agriculture	Salem, on Cap Mall	Interior only, city meter
4	Albina	Portland	Interior and grounds, city meter
5	Anderson Readiness Center	Salem, off Cap Mall	Interior and grounds, city meter
6	Archives	Salem, on Cap Mall	Interior only, city meter
7	Blind Commission	Portland	Interior and grounds, city meter
8	Burns	Burns, Off Cap Mall	Interior and grounds, city meter
9	Commerce	Salem, on Cap Mall	Interior only, city meter
10	DEQ/PHL	Portland	Interior and grounds, city meter
11	Employment	Salem, on Cap Mall	Interior only, city meter
12	Executive	Salem, on Cap Mall	Interior only, city meter
13	Ford House	Salem, on Cap Mall	Interior only, city meter
14	Garden Pride	Salem, on Cap Mall	Interior and grounds, city meter
15	General Service	Salem, off Cap Mall	Interior and grounds, city meter
16	General Service Annex	Salem, off Cap Mall	Interior and grounds, city meter
17	Governor's Residence	Salem, off Cap Mall	Interior and grounds, city meter
18	Green Lot	Salem, on Cap Mall	Grounds, well
19	GS Maintenance Shop	Salem, off Cap Mall	Interior and grounds, city meter
20	Human Services	Salem, on Cap Mall	Interior only, city meter
21	Huntington House	Salem, on Cap Mall	Interior only, city meter
22	Irwin House	Salem, on Cap Mall	Interior only, city meter
23	Justice	Salem, on Cap Mall	Interior only, city meter
24	Labor & Industries	Salem, on Cap Mall	Interior only, city meter
25	Labor & Industries Well	Salem, on Cap Mall	Irrigation well used to irrigate the entire capital mall area, water rights
26	Maintenance-Airport Road	Salem, off Cap Mall	Interior and grounds, city meter
27	McGilchrist House	Salem, on Cap Mall	Interior only, city meter
28	North Mall Office	Salem, on Cap Mall	Interior only, city meter
29	Orange Lot	Salem, on Cap Mall	Grounds, city meter
30	Oregon State Police	Central Point	Interior and grounds, city meter
31	Pendleton SOB- Single story	Pendleton	Interior and grounds, city meter
32	Pendleton SOB- Three story	Pendleton	Interior and grounds, city meter
33	Perry House	Salem, on Cap Mall	Interior only, city meter
34	Portland Crime Lab	Portland	Interior and grounds, city meter
35	Portland SOB	Portland	Interior and grounds, city meter
36	Print Plant	Salem, on Cap Mall	Interior and grounds, city meter
37	Property Distribution Center	Salem, off Cap Mall	Interior and grounds, city meter
38	Public Service	Salem, on Cap Mall	Interior only, city meter
39	Public Utility Commission	Salem, on Cap Mall	Interior only, city meter
40	Real Estate	Salem, on Cap Mall	Interior only, city meter
41	Red Lot	Salem, on Cap Mall	Grounds, city meter
42	Red Parking Lot Well	Salem, on Cap Mall	Irrigation well used to irrigate the entire capital mall area, water rights

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43	Revenue	Salem, on Cap Mall	Interior only, city meter
44	Salem Motor Pool	Salem, off Cap Mall	Interior and grounds, city meter
45	State Data Center	Salem, off Cap Mall	Interior and grounds, city meter
46	State Library	Salem, on Cap Mall	Interior only, city meter
47	Steam Plant	Salem, on Cap Mall	Interior and grounds, city meter
48	Stiff-Jarman House	Salem, on Cap Mall	Interior only, city meter

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Department of Consumer & Business Services (DCBS)*

Point of Contact: Nancy Cody, Operations Manager

Phone Number: (503) 947-7289

E-mail Address: Nancy.A.Cody@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: *We have engaged our Green Team in creating articles and outreach opportunities that are being shared in our agency newsletter, on our Green Team webpage, through posters and emails.*
REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.
 - Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: *We are working with DAS to ensure we have consistent messaging and providing that information as necessary or requested.*
REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.
 - Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.
REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.
 - Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
 - Provide water conservation information to private building owner if building is leased to your agency
 - Encourage owner to take steps to reduce water *use by sending them letters informing them of the executive order and explaining what we're doing in state buildings to reduce water usage and asking for their input/ideas.*
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns: Building owners may not be interested in participating.*
 - *Expected Results of Implementation: Water conservation.*
 - *Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result: We've reported numerous leaking faucets and broken sprinkler heads to DAS for repair. Savings is unknown by DCBS.*

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Department of Environmental Quality](#)

Point of Contact: [Todd Brown](#)

Phone Number: [503-229-6160](tel:503-229-6160)

E-mail Address: brown.todd@deq.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: [We will send out e-mails to agency staff. We intend to also provide staff information as to what they can do at home to reduce personal water use. We will distribute outreach materials provided by DAS.](#)

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: [We will post messages on our website and will be using templates provided by WRD and DAS. We will also use our Facebook and Twitter accounts to get messages out to the public.](#)

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Working with our various private landlords in the past to get information on our utility consumption has been difficult.](#)

- *Expected Results of Implementation:* [Minimal as we have already put several actions in place to reduce water consumption \(see below\) and we do not have landscaping at the majority of our facilities. Our only landscaping is at some of our Clean Air Stations \(vehicle inspection stations\). We are required to have landscaping in some locations by City code. However, we have moved to manual irrigation at these stations so that we water only as the plants become distressed.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [We have put in low flow toilets in many of our offices. No estimate for water savings\). In addition, we have a building handyman request form online so staff can report leaking water faucets/toilets and we can respond timely.](#)

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: Department of Human Services and Oregon Health Authority

Point of Contact: Jeremy Emerson

Phone Number: [503-269-0902](tel:503-269-0902)

E-mail Address: Jeremy.emerson@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: Signs will be posted in our facilities which encourage staff and visitors to reduce non-essential water use.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: We will include information about the water reduction initiative on our various web sites.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* We anticipate a high degree of partnership with our property owners we lease from. We look forward to receiving materials from both DAS and Water Resources Department which we can distribute and post.

• *Expected Results of Implementation:* Our anticipated results are indeterminate at this point in time.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Projects in motion have water conservation strategy language included in our leases with private building owners requiring them to reduce non-essential water usage.

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: Department of Land Conservation and Development

Point of Contact: Sadie K Carney

Phone Number: [503-934-0036](tel:503-934-0036)

E-mail Address: sadie.carney@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: Posting signs in common areas of office sites around the state encouraging our employees and those we share space with to curtail non-essential water use.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: Using the DLCD website to link to and promote state water conservation messaging.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other:

• *Potential Challenges/Concerns:*

• *Expected Results of Implementation:* Voluntary water use reduction of 10-15%

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Department of Geology and Mineral Industries*

Point of Contact: Ali Ryan Hansen
Phone Number: [971-673-0628](tel:971-673-0628)
E-mail Address: alison.ryan@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: DOGAMI awareness actions will include sending an initial all-staff email to inform staff of water conservation efforts and identify ways in which staff can conserve water; putting up signs in restrooms and kitchens to encourage conservation; and adding conservation tips and information to internal staff communications as much as possible.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: DOGAMI will add a link to the state's water conservation resources and information from primary web pages, and add information about actions DOGAMI is taking to conserve water. We will also develop messaging aimed to encourage water conservation among our mineral land reclamation and regulation program permit holders. The agency will also brainstorm connections between the work our geologic survey and services program does and the state's water resources, and use those connections to develop water conservation storylines for sharing on social media and other platforms, as well as integrating key statewide messages into our communications calendars. DOGAMI's outreach contact is Ali Ryan Hansen, 971-673-0628.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Oregon Department of Justice](#)

Point of Contact: [Marc Williams](#)

Phone Number: [\(503\) 378-5705](#)

E-mail Address: marc.d.williams@doj.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: DOJ will work with WRD, DAS and private landlords to post signage regarding water conservation, as well as educating staff and contractors on water conservation practices and sustainability.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: DOJ will work with Water Resources, private landlords, and DAS to post signage on DOJ facilities accessed by the public. Additionally, DOJ will post water conservation outreach materials on our external facing internet site. DOJ's Communications Director (for outreach) is Kristina Edmunson.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* DOJ does not own any land or facilities, rather occupying buildings as a tenant only. As a result, we are in a position where physical signage has to be communicated to and approved by our landlords. This shouldn't be a significant hurdle, however it will be a step that needs to be addressed.

- *Expected Results of Implementation:* An overall reduction of both water use and water waste, based on a higher awareness of water resources.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Messaging to all employees regarding drought conditions and the absolute need for conservation is planned. The drought message has already been communicated to executive leadership; however any estimate of water savings this early into the effort is not possible, primarily because in our primary locations DOJ is one of several tenants in our buildings.

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Department of Public Safety Standards and Training*

Point of Contact: Michael Anderson
Phone Number: [503-373-7055](tel:503-373-7055)
E-mail Address: michael.anderson@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: DPSST will hang signs around the agency to encourage state employees and contract services to reduce non-essential water use.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: DPSST will post a statement on our website and through our list-serves explaining our water conservation efforts and encouraging the public to help in the effort.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

Provide water conservation information to private building owner if building is leased to your agency

Encourage owner to take steps to reduce water use

Other:

• *Potential Challenges/Concerns:*

• *Expected Results of Implementation:*

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other:

• *Potential Challenges/Concerns:* One of the major challenges to DPSST is that the agency is anticipating a 30% increase facilities usage in 2016 that increase will result in a corresponding increase in our domestic water usage. *Also* currently DPSST has only a main water meter for our campus and we will need to install and integrate individual building meters to effectively monitor consumption, and identify and track issues through our Building Monitoring System.

• *Expected Results of Implementation:* With the anticipated facility usage increase in the coming years we will have an overall increase in water usage, but with better conservation efforts, metering at a building level, and with reductions and efficiencies in irrigated water consumption we expect to demonstrate the targeted reduction overall .

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: During the month of September 2015, irrigation was reduced. Sprinkler timers were reduced by 15% run time, across campus. The campus was built (2005) with conservation efforts in mind. Low-flow toilets and shower heads were installed in all dorm rooms and restroom facilities across campus.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other:
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other:

- *Potential Challenges/Concerns:* Some of the changes like getting automatic shut-off valves and weather-based irrigation controllers are dependent on budget.

- *Expected Results of Implementation:* With a reduced % of water on the schedule and installing weather-based controllers we feel that we could reduce the water by 15-20% in the irrigation system.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Facilities has just turned down the percentage the irrigation controller 15% of its water usage.

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- *Potential Challenges/Concerns:* Currently have many of the low flow shower heads and toilets already in place so as newer and more efficient devices come out we will have to see if they will make sense to install.

- *Expected Results of Implementation:* With the continued maintenance we can stop leaks that would waste water.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators

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- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- *Potential Challenges/Concerns:* DPSST currently has a contract service partner that runs the kitchen for the agency, we need to work with this partner to help with the reduction of water use without taking away from the health and safety, and food preparation requirements.

- *Expected Results of Implementation:* Kitchen staff implement procedural measures to save water having a significate impact on water conservation.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Highly efficient Dishwashing machine was installed at construction in 2005. Hand washing sinks have aerators installed, kitchen bathroom is equipped with low-flow toilet.

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other:

- *Potential Challenges/Concerns:* Our dorm laundry machines are owned and run by the Blind Commission so we would need to work with them to install more efficient machines if needed, also we do not have many of them on campus so the water usage is minimal.

- *Expected Results of Implementation:*

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: A high efficiency large/front load industrial clothes washer was installed to wash larger loads less frequently.

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other:

- *Potential Challenges/Concerns:*

- *Expected Results of Implementation:*

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Our custodial team uses dry mops for most of our campus mopping. Wet mopping is used only for special issues and/or projects. Mop buckets are equipped with a maximum fill-line to prevent waste and spillage.

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- vehicles washed in a facility using recycled water
- vehicles that must be washed to maintain public health and safety
- vehicles that must be washed to prevent the spread of invasive species
- vehicles that must be washed to prevent rusting or other maintenance issues
- vehicles washed only with cleaning agents (i.e., no water)

Other:

- *Potential Challenges/Concerns:* We operate in a training environment and the cleanliness of our vehicles must be maintained for safety concerns.
- *Expected Results of Implementation:* With the number of vehicles that need to be kept clean due to safety needs reductions in this area may be minimal. Other options to washing with water such as chemical applications will be perused and evaluated under cost and benefit analysis.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Vehicle washing is whenever possible done at the motor pool car wash where water is recycled and used efficiently.

h. *Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses*

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions

Other:

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

i. *Underserved Communities*

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*

Other:

- *Potential Challenges/Concerns:*

2. *Share Your Achievements - Conservation and Curtailment Actions in 2015*

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

3. *Prepare for Next Steps*

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

Oregon Public Safety Academy, located at 4190 Aumsville Hwy SE Salem, OR 97317.

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Department of State Lands*

Point of Contact: Kirk Jarvie

Phone Number: 503-986-5320

E-mail Address: kirk.jarvie@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan are submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Communications have been sent to all agency staff identifying the severity of the drought situation and the importance of practicing water conservation techniques. These messages have been reinforced by the agency director at a recent all-staff meeting including expectations for cooperation. DSL will post signage regarding non-essential water use as soon as such materials are available from WRD and DAS. In addition, the agency homepage contains updated information about the state's drought awareness.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

Water conservation signage will be posted throughout the Salem headquarters building in the main lobby areas, elevators and restrooms as well as the Bend leased space and public areas of the South Slough National Estuarine Research Reserve (SSNERR). Drought awareness campaign information is already prominently displayed on DSL's website home page. DSL outreach contact is Julie Curtis, Public Information Manager, Julie.curtis@state.or.us 503-510-6860, who participates in the state drought communications group.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Developed a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: **DSL Salem HQ building staff already report all water leaks of any kind (by e-mail or phone call) to the facilities manager as soon as observed for prompt action. SSNERR maintenance staff repair all leaks promptly when reported. DSL Bend office promptly reports any observed water leaks to property management company.**

- *Potential Challenges/Concerns:* **None.**
- *Expected Results of Implementation:* **Heightened awareness by staff and agency customers regarding wasteful practices and reporting.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Salem HQ building recently installed a new drinking fountain that includes a bottle filler and uses less water. Calculated savings up to 90 gallons per day.**

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: **The Dept. of Energy and DAS are currently working on a plan for all state agencies to report their per month water usage in a database that currently is also collecting monthly electrical and gas therm usage. SSNERR facilities are on well water and solar powered pumping system. Most DSL agricultural leases are served by water permits in lessees' name, so DSL does not receive usage reports. For most, the cost of pumping paid by lessees will encourage conservative water use. All DSL owned wells are metered and annual reporting is required.**
 - **Potential Challenges/Concerns: Crop production requires a certain amount of water for economically viable production. Producers cannot exceed water permit.**
 - **Expected Results of Implementation: Monthly usage reporting should result in better data that DSL can use to monitor water usage and evaluate the impact of conservation measures.**
 - **Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:**

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: **See information below.**
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: **DAS landscaping services perform these tasks for our agency-owned HQ building in Salem. SSNERR does not irrigate and landscaping is kept to a minimum during fire season.**

- **Potential Challenges/Concerns: Agriculture leases are commercial enterprises where production is dependent on irrigation, and directly provide income to the Common School Fund. Lessees will tend to self-regulate to balance production costs and crop yields. Monitoring will continue to be used to check for any concerns related to improper water usage.**

- **Expected Results of Implementation: Matching watering schedule to weather conditions is expected to reduce total consumption and also demonstrate a commitment to conservation practices to the visiting public.**

- **Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result: DAS landscaping services have already reduced the frequency of watering the grounds around the Salem HQ building.**

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: **The agency is currently looking at a plan to update all three floors of restrooms and kitchen in the State Lands Bldg. to more energy efficient and water saving features. SSNERR already utilizes low-flow toilets.**

- **Potential Challenges/Concerns: Additional cost of restroom and kitchen upgrades.**

- **Expected Results of Implementation: Decreased water consumption rate for HQ building.**

- **Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:**

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e.*, dishwashers, pre-rinse spray valves, ice machines, etc.) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: **The agency is looking to remodel the Salem HQ kitchen in the near future including features to reduce kitchen water consumption. SSNERR doesn't have any major appliances.**

- *Potential Challenges/Concerns:* **Cost of kitchen upgrades.**
- *Expected Results of Implementation:* **Decreased water consumption rate for Salem HQ building.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: **Not applicable.**

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other:

- *Potential Challenges/Concerns:* **None.**
- *Expected Results of Implementation:* **Decreased water consumption rates for Salem HQ building and SSNERR facilities.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water

- vehicles that must be washed to maintain public health and safety
- vehicles that must be washed to prevent the spread of invasive species
- vehicles that must be washed to prevent rusting or other maintenance issues
- vehicles washed only with cleaning agents (i.e., no water)

Other: **Vehicle washing not available at Salem HQ building location. Vehicle washing only at DAS Motor Pool (recycled water facility) and only on as-needed basis. Vehicles stationed in Bend operate in extremely dusty and muddy conditions where more routine vehicle washing is required to prevent excessive wear.**

- *Potential Challenges/Concerns:* **None**
- *Expected Results of Implementation:* **Ongoing practice**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Ongoing practice.**

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other:

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

- If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*

Other: **Not applicable. DSL water-saving measures are not expected to adversely affect under-served communities.**

- *Potential Challenges/Concerns:*

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

Due to ongoing drought, the carrying capacity on DSL-managed rangeland in eastern Oregon has been reduced across the board by 25% thus reducing stock water usage.

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

State Lands Bldg. in Salem

South Slough Reserve Interpretive Center

South Slough Maintenance Building

South Slough Spruce Ranch House

Agricultural land leased to private growers

Rangelands leased for forage production requiring stock water sources

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Dept. of Education](#)

Point of Contact: [Brian Marshall](#)

Phone Number: [503-947-5943](#)

E-mail Address: brian.marshall@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: [Post signs in breakrooms and restrooms to conserve water.](#)

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: [Post notices on website. Please send me outreach materials: brian.marshall@state.or.us, 503-947-5943](#)

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [To reduce water usage at work and home.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Employment Department](#)

Point of Contact: BONNIE K. ROBBINS

Phone Number: 503-947-1706

E-mail Address: bonnie.k.robbins@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

Response:

- ▶ Signage in showers, break rooms and bathrooms encouraging water conservation; to include approximate amounts of water used when allowing faucet to run freely while brushing teeth, washing hands, etc..
- ▶ Engage building program managers by requesting input on how to best identify and implement water conservation efforts in their site, tailored to their geographic area.
- ▶ Utilize the departments Project Approval process to alert Facilities to active leaks.
- ▶ Installation of water efficient fixtures in department owned locations planned for 17/19 biennium
- ▶ Develop and implement irrigation system spring start up standards (inspect for leaks, ensure irrigation system is running only between 8P & 7A, etc.), monitor and adjust irrigation levels.
- ▶ Develop low water use landscaping options for offices when replacing all or part of plantings.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

Response

- ▶ For each owned office, post on public information boards (electronic or hard copy – dependent on office) that individual offices water conservation efforts and the graph of the offices water usage.
- ▶ Signage in public bathrooms encouraging water conservation.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

Response

- ▶ Water usage for all agency owned buildings has been collected for calendar years 2013/2014. Data entered into Energy Departments program for tracking purposes. Will use this program as our base data collection and graphing/reporting method until common reporting method is implemented.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

Response

- ▶ Will utilize existing Project Approval process for offices to alert Facilities of active leaks
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use

Response

- ▶ DAS letter to private sector Lessors, their plan to meet with the AG's office to determine if water conservation language can be included in leases.
- Other:
 - *Potential Challenges/Concerns:*

Expected Results of Implementation:

Response

- ▶ Expect to meet 15% reduction for all OED owned buildings by December 31, 2020
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Response

- ▶ Completed in our Klamath Falls office as part of our multi-biennium office system upgrade project:
 - √ Replaced boiler and water heater office (vintage 1964)
 - √ Repaired and tuned irrigation system
 - √ Repaired all leaking building faucets; both indoor and outdoor
- ▶ Boiler replacement completed in June – 2015, first full tracking month – July 2015. The following is the water usage report for the K-Falls office, July 2013, July 2014, July 2015.

July 2013: 156,332 gallons
July 2014: 172,040 gallons
July 2015: 26,180 gallons (first full tracking month after conversion)

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*) (Not applicable, water sources metered)
- Institute a meter installation, testing and maintenance/replacement program
- Other:

Potential Challenges/Concerns:

- *Expected Results of Implementation:*

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)* **(Not applicable for Employment)**
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other:

Response

- ▶ Survey all agency owned locations to determine ability to replace irrigated landscaping with drought tolerant landscaping. Goal of replacing 50% of building landscaping by June 30, 2019.

- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other:

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*

Response

- ▶ Expect decrease in water usage in offices where landscaping is modified.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*

Response

- ▶ Expect decrease in water usage in offices where water efficient devices have not already been installed.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers **(Not applicable for Employment.)**
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- *Potential Challenges/Concerns:*

- *Expected Results of Implementation:*

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

e. Laundry Facilities (Not applicable for Employment)

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other:

- *Potential Challenges/Concerns:*

- *Expected Results of Implementation:*

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other:

- *Potential Challenges/Concerns:*

- *Expected Results of Implementation:*

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
- vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)

Other:

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

Provide training events for building maintenance staff to learn about specific *indoor* water saving equipment or actions (Not applicable for Employment)

Provide training events for grounds maintenance staff to learn about specific *outdoor* water saving equipment or actions (Not applicable for Employment)

Other:

Response

- ▶ Will add water savings practices/ideas/goals to existing energy savings communication to staff.
- ▶ Will add conservation measure results to existing energy savings communication for offices.

- *Potential Challenges/Concerns:*
- *Expected Results of Implementation:*
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

i. Underserved Communities (Not applicable for Employment)

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*

Other:

- *Potential Challenges/Concerns:*

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

Response

Completed in our Klamath Falls office as part of our multi-biennium office system upgrade project:

- ✓ Replaced boiler and water heater office (vintage 1964)
- ✓ Repaired and tuned irrigation system
- ✓ Repaired all leaking building faucets; both indoor and outdoor

- ▶ Boiler replacement completed in June – 2015, first full tracking month – July 2015. The following is the water usage report for the K-Falls office, July 2013, July 2014, July 2015.

July 2013:	156,332 gallons
July 2014:	172,040 gallons
July 2015:	26,180 gallons (first full tracking month after conversion)

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Oregon Department of Energy](#)

Point of Contact: [Kaci Radcliffe](#)

Phone Number: [503-378-4041](#)

E-mail Address: kaci.radcliffe@odoe.state.or.us

Check All that Apply

Agency leases facilities from a private building owner – Complete Section A (**[Currently](#)**)

Agency leases state facilities – Complete first three boxes in Section A (**[Anticipated move to DAS facility in 2016](#)**)

Agency owns facilities and/or lands – Complete Sections A and B

Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

While Oregon Department of Energy is and will continue to be a tenant in a privately owned building, we believe there are important actions and behaviors that can help conserve water. ODOE has a well-established Sustainability Committee and Sustainability Coordinator, which is responsible for sustainability-related outreach and education to staff. Working with our Building Services Coordinator, the Committee will continue to promote water conservation activities through periodic email updates, staff training, posted information on the internal website and bulletin boards, and serve as the point of contact for staff questions and recommendations. As state-wide signage and messaging becomes available, the Sustainability Coordinator will disseminate these materials to staff and members of the public.

ODOE does anticipate it will move into a DAS-owned facility early next year. The Sustainability Committee plans to update outreach materials and train staff on DAS policies related to resource and water conservation prior to the move. The Coordinators will also complete periodic assessments of staff water use, identify any areas of improvement, and communicate with staff on how to conserve water at the office and in the programs and services they provide.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

ODOE will share water conservation messages by posting public outreach materials that are provided by DAS/WRD on the ODOE website and sustainability bulletin board. Staff will also be given any paper and electronic outreach materials so they may provide them to the public when they participate in agency programs and communications.

The Sustainability Coordinator, Kaci Radcliffe, will work with the Communications Manager, Rachel Wray, on distribution of any outreach and educational materials.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

The Sustainability Coordinator will serve as the key point of contact and ensure ODOE meets all of the reporting requirements listed in Executive Order 15-09. With the anticipated move into a DAS facility, we will work with the DAS staff to ensure any required information is provided.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

The Sustainability Committee and Building Services Coordinator will provide updates to staff, gather feedback, and identify areas needing improvement. With the expected move, our Coordinators will communicate with DAS staff to ensure all possible water conservation improvements and actions are being taken. The Coordinators will also collaborate with Garten to ensure all custodial services/actions align with best practices for saving water.

- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use

Other:

- *Potential Challenges/Concerns:*

As a building tenant, ODOE may be limited in the amount and type of building retrofits or maintenance of exterior landscaping. To address this challenge, ODOE will incorporate retrofits where permitted and work closely with the building owner to minimize or eliminate water used for landscaping.

- *Expected Results of Implementation:*

By maintaining staff and public awareness, we expect an increase in behaviors that conserve water. This should result in a reduction in water use and some water use cost savings.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Since 2008, ODOE has maintained a Marion County EarthWISE certification, which recognizes organizations that have made a commitment to environmentally friendly practices. As a core element of the certification, the agency completed several water conservation activities, including: installed low flow toilets and showerheads, installed faucet aerators in bathroom and kitchen, installed a dishwasher to wash full loads of dishes, and wash the fleet vehicles at State Motorpool. With the release of the Executive Order, the Sustainability Coordinator sent an update to all staff and plans to share the Water Conservation and Efficiency Plan and future reports with all staff.

After moving into the new location, the Sustainability Coordinator will work with Marion County to complete a facility assessment, ensure the EarthWISE criteria related to water conservation are met, and acquire a new EarthWISE certification. This will include working with DAS staff on any needed water-saving retrofits and providing expanded staff education on water conservation behaviors.

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: **Oregon Department of Forestry**

Point of Contact:

D. Chris Stewart, PE, Facilities Director

Phone Number: (503) 945-7375

E-mail Address: David.C.Stewart@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review EO 15-09 Guidance Document #1 before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Through agency-wide outreach, education, and training. The intent is to distribute and strategically place signs/placards in areas where emphasizing the water conservation message is the most effective, and to continuously champion environmental stewardship with consistent messaging.

Examples:

-Messaging on the agency's internal website (ODFNet), sending emails that include tips and reminders on how to reduce water consumption, and to update all staff on the progress the agency is making.

-Strategic messaging placement would include all restrooms, kitchen areas, break rooms, and bulletin boards.

-Water Resources Department (WRD) and Dept. of Administration Services (DAS) provided signs will be posted in all of the Dept. of Forestry's (ODF) facilities to encourage employees to reduce their non-essential water use at work and in their private lives.

The goal is to create staff awareness with respect to what the savings goals are and how we are doing as an agency overall on a continuous basis – most likely quarterly.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

Agency's Public Affairs Officer: Toni Andersen, Public Affairs Director
(503) 945-7420
Toni.Andersen@oregon.gov

It is recommended that a consistent messaging campaign be developed by DAS/WRD/Governor's Office in order to establish messaging continuity across all agencies.

Examples:

- The agency will post signs in all of its public restrooms and in other areas that are visible to the public such as bulletin boards and lobby entrances.
- The placement of water conservation messaging on the agency's external website that will spread the message in a public forum.
- Conservation and sustainability messaging will be conveyed via the agency's internal website (ODFNet) and email correspondence for all staff outreach.
- Posting water conservation slogans and information using WRD and DAS provided templates and outreach materials.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.
 - Similar to the reporting requirements to the Oregon Dept. of Energy (ODOE), the agency will keep track of water consumption annually to report to WRD. This will also include the continuous refinement of the current measures taken and the implementation of more water savings opportunities as needed.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
 - The objective is to develop a channel of communication that will provide easy access for ODF staff here at the Salem Campus HQs and also statewide to contact Salem Facilities Staff to report leaks and report wasteful non-essential and inefficient essential water use. Facilities is working with Salem IT to develop a Facilities HelpDesk for staff to contact Facilities via the ODFNet website. The expected implementation date is fall/winter 2015.
- Provide water conservation information to private building owner if building is leased to your agency
 - Encourage owner to take steps to reduce water use. **N/A**
- Other:
 - Potential Challenges/Concerns:
 - Developing an accurate reporting system for well systems since many wells lack the proper metering equipment. This includes additional costs that will be incurred.
 - Multiple buildings served by one meter. In order to maximize savings sub-metering should be considered.
 - Expected Results of Implementation:
 - Savings TBD
 - Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:
 - Examples*:**
 - Turf / Landscape Irrigating: Irrigation scheduling reduced by 35-40% at the Salem Campus HQ.

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- Facilities Restrooms/Breakrooms/Laboratories/Kitchen Areas: water supply flow rates (hot/cold) have been evaluated and reduced where feasible.
- Automotive Shop Wash Bay: vehicle washing services have been curtailed.
- Building Maintenance Services (washing/cleaning): Salem Campus HQs building exterior cleaning services have been deferred until further notice. This includes windows, doors, and siding.
- The agency has solicited proposals from landscape architects to assist in developing a strategy to manage the matured landscape in order to maximize water savings opportunities. This includes the clearing/grubbing of bushes/shrubbery and trees that are encroaching on our buildings, and to remove bushes/shrubbery and trees that do not meet the current landscape design objective, and to also consider the introduction of more drought tolerant plant species where applicable.

***All savings TBD**

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (or has implemented in 2015) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See EO 15-09 Guidance Document #1 for assistance.

See current measures taken at the Salem Campus HQ in Section 2. These measures are intended to set the example for all of ODF's District Offices, Units, and Guard Stations statewide.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
-Currently underway at the Salem Campus HQs. This includes 2.75 acres of turf, 2 acres of beds, and 1.5 acres of parking area islands. The goal is to allow the grass to go dormant and to keep the foliage/trees and ornamental shrubbery on life support.
- Moratorium on installing new non-essential landscaping that requires irrigation.
-Being scoped
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
-Being scoped.
-The agency is planning on placing signs/placards in all locations that will maximize the messaging effort to conserve such as restrooms, kitchen areas, and breakrooms, etc.
- Leak assessment.
-Being scoped
- Consider any social and disproportionate effects of actions on underserved communities.
-Being scoped
 - a. **Source and Conveyance / Distribution System**
 - Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
-Being scoped
 - Locate leaks and repair in a timely manner*
-Being scoped
 - Meter water sources (if not already metered)
-Salem's water meters are tracking multiple buildings so it will be difficult to provide actual water use per location/building unless additional service meters are added (sub-

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metering). In some cases there is a blend in the administrative and fire operations function which will pose a challenge when attempting to separate the essential and non-essential water use from a reporting standpoint.

- ☒ Institute a meter installation, testing and maintenance/replacement program.
 - Being scoped
- ☒ Other:
 - Insulate water lines where feasible to prevent freeze damage and the subsequent loss of water.
 - Salem Facilities has a system in place for inspecting all water systems on a regular basis to identify any potential or immediate leak issues.
- Potential Challenges/Concerns:
 - Metering and sub-metering may be cost prohibitive to implement and maintain in locations such as some buildings, ground source well systems, and surface water sources that currently do not have them installed.
- Expected Results of Implementation:
 - Savings TBD
- Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:
 - A reduction in the landscape irrigation load is currently in progress.
 - Savings TBD

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (except for those that use recycled water). At fountains using recycled water, provide explanatory signage (if possible)* **Salem – N/A and Statewide – N/A**
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
-Being scoped
- Reduce water used for irrigation* (i.e., landscaping, pasture, crops, etc.), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering.
-Salem Facilities has landscape irrigation controllers/schedulers currently in place allowing the continual adjustment to reduce irrigation loads based on weather conditions and most recently as required by the drought EO.
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
-A Landscape site review is being proposed reducing over-grown foliage. The original landscape architect will be reviewing our site for the potential removal of some matured landscaping and also considering more drought tolerant plant species where applicable. This potential change in design is intended to permanently reduce the overall irrigation load.
 - Adjust watering schedule throughout the season to match weather conditions
-Irrigation controllers are already in place and the adjustments have been made to reduce the overall load.
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
-This water capture system is a possible consideration for the Salem HQs and Statewide. The cost associated and practicality needs are to be further scoped.
 - Other:
-Being scoped
- Use reclaimed/recycled water for irrigation in place of primary water source(s).
-To be further scoped
- Other:
-Scoping to retrofit existing vehicle wash bays with a recycled water loop where feasible, including both Salem Campus HQs and the Statewide Offices where applicable.

• Potential Challenges/Concerns:

-Loss of traditional exterior landscape aesthetic may become a concern to ODF staff, patrons of the Agency, Landowners, and the public.

• Expected Results of Implementation:

-Savings TBD

• Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-See current measures taken in Section 2

-Savings TBD

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads

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- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently.
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

-Install electronic faucets that control the duration of flow where cost effective.

- Potential Challenges/Concerns:

-Salem Campus HQ's custodial services are already at a minimum.

- Expected Results of Implementation:

-Savings TBD

- Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-The reduction of hot/cold water supply flowrates in some locations.

-Savings TBD

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (i.e., dishwashers, pre-rinse spray valves, ice machines, etc.) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers.
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

- Potential Challenges/Concerns:

-Whether the measures desired to be implemented are cost-effective.

- Expected Results of Implementation:

-TBD

- Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-The reduction of hot/cold water supply flowrates in some locations.

-Savings TBD

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (except as necessary for health and safety purposes)
- Run only full loads in washing machines
- Other:

-Use detergent products that do not require secondary rinse cycles if applicable.

- Potential Challenges/Concerns:

-Essential use needs such as fire season laundering needs (i.e., poison oak exposure, etc.)

- Expected Results of Implementation:

-TBD

- Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-Being scoped

f. Building Maintenance

- Reduce the frequency of window washing with water

-Effective immediately

- Eliminate window washing with water (investigate the feasibility of only using cleaning agents)

-Effective immediately

- Reduce the frequency of mopping with water, except as needed for public health and safety

-Effective immediately

- Reduce or eliminate the frequency of pressure washing

-Effective immediately

- Other:

-Site building exterior cleaning shall be reduced from a semi-annual to an annual service.

- Potential Challenges/Concerns:

-Backlog in deferred maintenance

- Expected Results of Implementation:

-TBD

- Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-See current measures taken in Section 2

-Savings TBD

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:

- vehicles washed in a facility using recycled water
- vehicles that must be washed to maintain public health and safety
- vehicles that must be washed to prevent the spread of invasive species
- vehicles that must be washed to prevent rusting or other maintenance issues
- vehicles washed only with cleaning agents (i.e., no water)

- Other:

-TBD

- Potential Challenges/Concerns:

-ODF Fire related response support equipment and vehicles will need to maintain the typical health and safety standards and also be prepared for immediate emergency response. Water savings in this area will be very minimal due to the operational needs and the fact that this is considered an essential service.

- Expected Results of Implementation:

-Savings TBD

- Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-See current measures taken in Section 2

-Savings TBD

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions

-Work with DAS/WRD to develop training tools and methodology to educate staff on the steps to take to conserve.

- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions

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-Work with DAS/WRD Work with DAS/WRD to develop training tools and methodology to educate staff on the steps to take to conserve.

Other:

-To provide specific savings metrics and outcomes for staff to establish context.

-It would be beneficial to provide the savings data for the agency staff for review showing the agency's typical base-line use and the savings delta, similar to the energy data posted on the Facilities ODFNet web page.

• Potential Challenges/Concerns:

-To realize an immediate change in staff behavior.

• Expected Results of Implementation:

-TBD

• Actions Already Implemented in 2015: Identify actions and, if possible, include an estimate of the amount of water saved as a result:

-See current measures taken in Section 2

-Savings TBD

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*

Other:

-To be scoped but currently it is assumed that an impact will be minimal to non-existent.

• Potential Challenges/Concerns:

-TBD

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

Water Conservation Plan (ver. 1.0)

The objective is to begin analyzing the steps that can be taken to reduce all non-essential water consumption, and to increase the overall water distribution system efficiency at the ODF Salem Campus HQs with the goal of refining and establishing a permanent plan that can be implemented statewide. The steps below represent the actions taken by Salem Facilities to begin this process:

- **Turf and Landscape Irrigation (programmable and manually operated systems)**

Reduction Plan: Limit or eliminate landscape irrigation where feasible.

Result: This is a substantial water savings opportunity since irrigation can typically consist of 20 - 30% of the total water consumption load during the irrigation season. For the Salem Campus HQ alone this includes 2.75 acres of turf, 2 acres of beds, and 1.5 acres of parking area islands. The goal is to allow the grass to go dormant and to keep the foliage/trees and ornamental shrubbery on life support. There is a slight risk during the summer months that the turf could suffer irreversible damage.

Feasibility: This method of water savings reduction can be considered low hanging fruit by easily adjusting the irrigation schedules.

Cost: Minimal for the Salem Campus HQs. This task can be completed with Salem Facilities. There would be an increase in cost in the event that other systems, specifically at our District Offices, will need to be retrofitted with digital control devices that are programmable.

- **Facilities Restrooms**

Reduction Plan: Adjust/calibrate lavatory flowrates for both hot and cold water supply where feasible. Evaluate all fixtures for low flow/flush compliance. Scope the implementation of high-efficiency faucets with reduced gallons per minute flow rates. Inspect all faucets for the presence of aerators.

Result: Reduced water consumption and still meet minimum health and safety standards.

Feasibility: This method of reducing water flow to all facilities fixtures can be quickly accomplished by adjusting main water flow valves to a lower output volume resulting in less consumption. One drawback that needs to be considered is the wait time for hot water to arrive. This could have effects that are counter to the savings objective.

Cost: Minimal. Task can be completed by Salem Facilities staff. In the event that some/all of the faucets will be replaced with automatic/sensor faucets there will be a considerable investment needed which will subsequently increases the cost in implementing this measure.

- **Lunch and Break Room Facilities**

Reduction Plan: Adjust/calibrate lavatory flowrates for both hot and cold water supply. Evaluate all fixtures for low flow/flush compliance. Scope the implementation of high-efficiency faucets with reduced gallons per minute flow rates. Inspect all faucets for the presence of aerators.

Result: Reduced water consumption and still meet minimum health and safety standards.

Feasibility: This method of reducing water flow to all facilities fixtures can be accomplished by adjusting main water valves reducing flow volume resulting in less consumption. One drawback

that needs to be considered is the wait time for hot water to arrive. This could have effects that are counter to the savings objective.

Cost: Minimal. Task can be completed by Salem Facilities staff. In the event that some/all of the faucets will be replaced with automatic/sensor faucets there will be a considerable investment needed which will subsequently increases the cost in implementing this measure.

- **Insect / Forensics Labs**

Reduction Plan: Adjust / calibrate faucet flowrates for both hot and cold water supply.

Result: Reduced water consumption and still meet minimum health and safety standards.

Feasibility: This method of reducing water flow can be quickly accomplished by adjusting main water flow valves to a lower output volume resulting in less consumption. One risk that needs to be considered is the wait time for hot water to arrive and the minimum flow rate standards for unique environments such as labs.

Cost: Minimal. Task can be completed by Salem Facilities staff. In the event that some/all of the faucets will be replaced with automatic/sensor faucets there will be a considerable investment needed which will subsequently increases the cost in implementing this measure.

- **Fire Cache Operations**

Reduction Plan: Curtail the washing and cleaning services where feasible without impacting the essential needs of the fire-fighting operations.

Result: Vehicle and equipment appearance and function could be affected.

Feasibility: In some cases savings can be realized with the reduction of some services; however, due to the critical nature of the operations and the exemptions as outlined by WRD for emergency services, the savings will be minimal.

Cost: Minimal

- **Motor Pool Operations**

Reduction Plan: Cease all vehicle washing and cleaning services. Utilize DAS Motor Pool vehicle wash services when necessary.

Result: Savings TBD

Implementation: Immediate

Cost: Minimal

- **Building Maintenance (exterior washing /cleaning)**

Reduction Plan: Reschedule exterior cleaning services until next year. This includes exterior siding, windows, and doors.

Result: Building exteriors, including windows and doors, would be cleaned less often. There could be an increase in deferred maintenance since the preparatory work for building exterior siding and door painting would require pressure washing which has ceased until further notice.

Implementation: Immediate

Cost: The long term deferred maintenance backlog cost is unknown at this time.

- **Cooling Tower Evaporative Systems**

Reduction Plan: Consider the possibility of adjusting zone temperature set-points to reduce the heating/cooling loads.

Result: TBD. The potential to also realize energy savings beyond the ODOE mandated 20% is being scoped also.

Cost Involved: No Cost. Task can be completed by Salem Facilities staff.

- Custodial Services (regular duty services)

 - Monitor usage and continue services since those services are currently set at a minimum.

- Monitor Existing Water Systems

 - Periodic monitoring of water use to identify leaks in the existing plumbing and irrigation systems.

- Rainwater Capturing System

Reduction Plan: The potential to incorporate alternate water sources such as non-potable water harvesting is being scoped. This would include the capture of rain water run-off from roof tops and vehicle wash water, and to develop a recycling system for irrigation needs.

Result: Costly and must be further scoped since our current system is not designed to incorporate this into the existing plumbing and exterior rain water capture system.

Implementation: TBD

Cost Involved: TBD

- Other water savings opportunities and measures being scoped (long-term and short-term):

Facility Auditing

 - Preliminary assessment of all of our buildings

 - Investment grade audits to be scoped

 - Building pressure analysis in some or all of our buildings: static and dynamic pressure analysis

 - Life cycle cost analysis with respect to larger upgrade investments

Metering Audits

 - The auditing of all of our meters and what types they are (i.e. measuring metric, ground source water and surface water harvesting tracking, etc.)

Domestic Plumbing System Audits

 - Toilets

 - Urinals

 - Flush valves

 - Faucets

 - Showerheads

Landscape and Irrigation Audits

 - Drought resistance plant and tree species

 - Implementation of advanced digital controls (DDC)

HVAC & Mechanical Equipment Audits

 - Cooling towers

 - Boilers

 - Pumps, compressors, condensers

Water Supply Options and Sources

 - Potable water

 - Non-potable fresh water

 - Alternative water sources

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- Gray water
- Water recycling

Storm Water Management Systems Implementation for all future construction projects

- Green roofs
- Rain gardens
- Permeable pavement

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. More information will be forthcoming.

The agency is currently working with ODOE to enter data into Portfolio Manager, which will help facilitate the management of both water and energy consumption for all of our buildings and structures statewide. We are also working with DAS to track our buildings via iPlan, which is a database that will capture both the static and dynamic stats of our comprehensive building and structures portfolio. The key is to develop a long term strategy to minimize the deferred maintenance backlog, and to establish a better method/methodology to evaluate all of our building systems for efficiency deficiencies.

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Office of Governor Kate Brown***

Point of Contact: Lauri Aunan

Phone Number: [503-373-1680](tel:503-373-1680)

E-mail Address: lauri.aunan@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: The Governor's Office leases office space from the Department of Administrative Services and from private or other governmental entities. To encourage voluntary water conservation actions by Governor's Office staff, we will 1) Post signs in offices outlining how people can conserve water in the office and at home, 2) Share examples about actions people can take, and have taken, at work and home to conserve water; 3) Encourage employees to report leaks, inefficiencies and other wasteful water use practices to their building manager/facilities manager; 4) Provide water conservation information, and encourage water-saving actions, for non-state agency building owners from whom the Governor's Office leases space; 5) Continue to act as a convener in bringing together state agencies and private stakeholders in working towards drought mitigation and awareness goals.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: During 2015, the Governor's Office established a Drought webpage, and used social media to convey information about drought and water conservation. The Governor has highlighted drought and water conservation awareness and actions in PSAs, speeches, and news releases. The Governor's Office will continue to update and improve its drought webpage and use social media and events to raise awareness and encourage actions to conserve water.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: Continue to convene and coordinate state agency teams to implement Executive Order 15-09 and identify additional actions the state should take to improve water conservation and resiliency to drought.

• *Potential Challenges/Concerns:* During times when the state is not experiencing drought conditions, it will be more difficult to maintain and improve people's awareness of water conservation needs and people's attention to taking action to improve water conservation.

• *Expected Results of Implementation:* Increased awareness by the Governor's Office staff and members of the public about the importance of water conservation and actions they can take to conserve water. Increased coordination and collaboration among state agencies and local and federal partners.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: 1) Governor's PSAs on drought and water conservation. 2) Governor's Office Drought webpage established. 3) Governor's Office convened 2015 Oregon Drought Team. The Drought Team brings together federal, state, local, and private sector partners to coordinate efforts to address drought-related issues. The team's meetings include: a) Sharing information about drought conditions across Oregon, and how drought is affecting Oregonians. b) Sharing information

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about efforts to plan for drought and water resources challenges, including success stories on how Oregonians have prepared for and are responding to these challenges. c) Identifying potential individual, local, state and federal actions that can assist Oregonians in responding to drought. d) Providing feedback on existing drought response tools and policies, and how to improve Oregon's resiliency to drought in the future. 4) Executive Order 15-09 issued. 5) Governor's Office convened inter-agency teams to implement Executive Order 15-09: a) Members of the Drought Council, to update the Oregon Emergency Operations Drought Annex. b) DAS and the Water Resources Department, to lead agency water conservation plan development, baseline water use identification, and reporting on actions to reduce non-essential water use to achieve the goal of 15% reduction of non-essential water use across all state agencies by 2020. c) Agency Drought Communications Team, to improve communication and outreach to the public about drought conditions and actions to improve water conservation.

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

The Governor's Office does not own land or facilities.

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:
[Click here to enter text.](#)

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)

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- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
 - Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
 - Install faucet aerators
 - Install low-flow showerheads
 - Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
 - Reduce frequency of mopping with water, except as needed for public health and safety
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
 - *Expected Results of Implementation:* [Click here to enter text.](#)
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
 - Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
 - Install faucet aerators
 - Install an instant hot water dispenser to reduce time water is runs while heating up
 - Run only full loads in dishwashers
 - Reduce frequency of mopping with water, except as needed for public health and safety
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
 - *Expected Results of Implementation:* [Click here to enter text.](#)
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
 - Reduce the frequency of washing (*except as necessary for health and safety purposes*)
 - Run only full loads in washing machines
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
 - *Expected Results of Implementation:* [Click here to enter text.](#)

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- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

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If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)

Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* [Click here to enter text.](#)

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/o

- 1) Governor's PSAs on drought and water conservation.
- 2) Governor's Office Drought webpage established.
- 3) Governor's Office convened 2015 Oregon Drought Team. The Drought Team brings together federal, state, local, and private sector partners to coordinate efforts to address drought-related issues. The team's meetings include:
 - a) Sharing information about drought conditions across Oregon, and how drought is affecting Oregonians.
 - b) Sharing information about efforts to plan for drought and water resources challenges, including success stories on how Oregonians have prepared for and are responding to these challenges.
 - c) Identifying potential individual, local, state and federal actions that can assist Oregonians in responding to drought.
 - d) Providing feedback on existing drought response tools and policies, and how to improve Oregon's resiliency to drought in the future.
- 4) Executive Order 15-09 issued.
- 5) Governor's Office convened inter-agency teams to implement Executive Order 15-09:
 - a) Members of the Drought Council, to update the Oregon Emergency Operations Drought Annex.
 - b) DAS and the Water Resources Department, to lead agency water conservation plan development, baseline water use identification, and reporting on actions to reduce non-essential water use to achieve the goal of 15% reduction of non-essential water use across all state agencies by 2020.
 - c) Agency Drought Communications Team, to improve communication and outreach to the public about drought conditions and actions to improve water conservation.

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3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Housing and Community Services***

Point of Contact: Sandy McDonnell
Phone Number: [503-986-2012](tel:503-986-2012)
E-mail Address: sandy.mcdonnell@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

Oregon Housing and Community Services

- Post signage at water utilization locations (water fountains, restrooms, break rooms) to promote water conservation.
- Publish articles in the department's internal newsletter on conservation measures that can be implemented at home (i.e. rain barrels and xeriscaping). Update employees on measures implemented in the building.
- Create a link on the department's intranet for water conservation measures, ideas, articles and information. Create a suggestion box for employees to submit ideas.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: **Sandy McDonnell**

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

Oregon Housing and Community Services

- Post informational signage on measures implemented within building (i.e. why lawns are brown).
- Recommend DAS look into dual flush toilets. Current toilets flush 2-3 times per use.
- Limit the number of plants allowed in office space to minimize internal water usage.
- Use baseline information to market pre- and post- water savings. Have savings displayed in the building.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency.

N/A

- Encourage owner to take steps to reduce water use N/A

- Other: **Actively solicit water conservation ideas and suggestions from staff.**

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Other: **Partner with other building tenants to host a conservation event and invite vendors with information or products to encourage water conservation at home. Notify other state agencies and encourage staff to attend.**

- *Potential Challenges/Concerns:* **Inability to effect change in building water usage (DAS Building).**
- *Expected Results of Implementation:* **Increased knowledge on how to conserve water.**
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **A protocol has been developed for staff to report leaks**

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon State Lottery***

Point of Contact: Jeff Beck
Phone Number: [503-540-1298](tel:503-540-1298)
E-mail Address: jeff.beck@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: Website and facilities postings
Examples include:
 - Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.
 - Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: Posting of information on agency website. Contact: Jeff Beck
Examples include:
 - Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.
 - Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.
 - Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
 - Provide water conservation information to private building owner if building is leased to your agency
 - Encourage owner to take steps to reduce water use
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* Some leased sites do not have metering for water usage by tenant.
 - *Expected Results of Implementation:* Awareness
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Eliminated irrigation of landscaped areas after email dated 9/1/15 was received. September 2014 irrigation usage was 595 units (445,060 gallons) that was not used in September of 2015.

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:
[Click here to enter text.](#)

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)

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- *Expected Results of Implementation:* 15%+ reduction throughout the irrigation season.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Eliminated irrigation of landscaped areas after email dated 9/1/15 was received. September 2014 irrigation usage was 595 units (445,060 gallons) that was not used in September of 2015.

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* Remodeling of restrooms are not anticipated until 2020.
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Replaced both washer and gas dryer for laundering custodial materials (both units were 20 years old). Replaced with Energy Star Rated appliances. Water savings expected is minimal.

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* Savings of less than 1,000 gallons per year.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Discontinued annual pressure washing of concrete sidewalks and patios after receipt of 9/1/15 email. Savings of less than 500 gallons estimated.

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: Selection of car washing facilities that recycle wash water throughout the state.

- *Potential Challenges/Concerns:* Some area of the state may not offer car washing establishments that recycle water.
- *Expected Results of Implementation:* Unknown.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

i. *Underserved Communities*

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)

Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

2. *Share Your Achievements - Conservation and Curtailment Actions in 2015*

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

[Click here to enter text.](#)

3. *Prepare for Next Steps*

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

- Lottery HQ – Land owned by/ leased from DAS – 500 Airport Rd. SE Salem, OR
- Lottery Warehouse – Leased from McGraw Holdings – 2561 Pringle Rd. SE Suite 170 Salem, OR
- Area A Depot – Leased from Kerr Commercial – 234 SE Salmon Ave Redmond, OR
- Area B Depot – Leased from By Family – 690 Brian Way Medford, OR
- Area D Depot – Leased from Hyland Business Park – 4660 Main St BLDG C Suite 540 Springfield, OR
- Area E Depot – Leased from Pacific Trust Realty – 12421 NE Marx St Portland, OR
- Area F Depot / Payment Center – Leased from Pacific Northwest Properties – 9760 SW Wilsonville Rd. Suite 130 Wilsonville, OR
- Burns Archive / Data Center – Owned by Lottery, leased to Harney County – 1804 W. Monroe St. Burns, OR

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon State Marine Board***

Point of Contact: Ashley Massey
Phone Number: [503-378-2623](tel:503-378-2623)
E-mail Address: Ashley.massey@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

Explain how you will encourage voluntary actions to conserve water: The Oregon State Marine Board leases office space in downtown Salem at 435 Commercial St. NE, Suite #400. This building is located between the Marion Street and Center Street bridges and across Commercial St. from Rite Aid. The building has three occupants and one office space for lease. There is very limited vegetation on the East and South side of the building, and the other two sides are parking lot and alley. OSMB's office space includes a breakroom, one male and one female restroom, as well as one male and female restroom that are shared with the space currently for lease. The Marine Board has taken the following actions to encourage water conservation:

- Signs have been posted near the restrooms, in every main hallway, exit doors and breakroom encouraging employees to conserve water.
- Agency staff may include a water conservation hyperlink in their email signature that links to the state drought web page.
- Added a water conservation logo with messaging on the [agency's website](#).



REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: The agency does not own land or additional facilities, but works with governmental agencies, private marinas and others who may have more ability to reduced non-essential water usage. The Marine Board has or will take the following actions to provide water conservation information to the public:

- The Marine Board has posted drought information on our website and will expand the information to include water conservation measures.
- The agency works with 63 Clean Marinas around the state that are certified by OSMB. OSMB will provide water conservation messaging for them and will ask for their help to promote "calls to action" that their customers can take to conserve water. While the Marine Board cannot require action on their part to conserve water, we can encourage them to conserve.
- The agency will include water saving messaging in the quarterly Boating Facilities Newsletter, *Boat Access Today*, which is distributed to public agencies that operate boating access facilities around the state.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
 - Provide water conservation information to private building owner if building is leased to your agency
 - Encourage owner to take steps to reduce water use
 - Other: Agency staff has been given information on how to report leaks or wasteful water use. The agency will contact the building owner with examples of water conservation measures and encouraging him to implement water savings methods where practicable.
- *Potential Challenges/Concerns:* There is very little discretionary water use at the agency, so most internal measures will result in little savings.

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- *Expected Results of Implementation:* Little if any savings since very little discretionary water use occurs within the building. However, outreach to partners and the public may result in significant savings, however, these savings may not be known to the Marine Board.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: The agency has already posted signage and has started the conversation with external stakeholders. No known amount of water savings has been documented. Recently, the Oregon Yacht Club installed individual water meters and has seen a 50% savings in water consumption. This change was a result of their management and not OSMB urging, however, the success has been shared with other marinas.

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Military Department***

Point of Contact: Timothy Gilbert
Phone Number: [503-584-3491](tel:503-584-3491)
E-mail Address: timothy.l.gilbert1.mil@mail.mil

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: **The Oregon Military Department will expand its already existing water conservation awareness campaign currently in place at Camp Rilea to cover its state wide properties. This campaign includes identifying non-essential water usage, outreach and education to inform about water conservation and measures to be taken.**

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:
Education campaign will be driven by our Energy Manager Mr. Joe Colello, focusing on outreach, including reader boards messages and signage in public spaces, updates to our web sites, and an internal process that pushes information and requirements to all Oregon National Guard members. Any assistance with outreach materials would be appreciated.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)
- Issue orders directing water reduction and conservation measures

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: **The Oregon Military Department has hired a consultant to develop base lines and recommended strategies to meet all federal and state mandated sustainability executive orders including Executive Order 15-09.**

• *Potential Challenges/Concerns:* **Limited funding will restrict the agency's ability to implement major infrastructure projects. However Oregon Military Department has four major renovation projects funded that will incorporate conservation measures.**

• *Expected Results of Implementation:* **The Oregon Military Department anticipates meeting the target of 15% reduction goal for non-essential water consumption by December 31, 2020.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Initial education efforts and curtailment of landscape irrigation during the months of August and September. Current construction projects include native plantings that will only require temporary irrigation for plant establishment. Preliminary results from these actions are positive.**

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions
- Moratorium on installing new non-essential landscaping that requires irrigation
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: **The Oregon National Guard in compliance with National Guard Bureau installs smart utility meters on all new construction and major renovations to allow for real time monitoring of utilities.**
 - *Potential Challenges/Concerns:* **Limited funding to add additional smart meters on existing facilities.**
 - *Expected Results of Implementation:* **Real time monitoring to detect issues and react and correct issues.**
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:
The Oregon Military Department in compliance with National Guard Bureau requirements reports water and other utility consumption quarterly, this database helps target trends and issues to correct.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)

• **Potential Challenges/Concerns: With limited funding to modify existing landscape and irrigation systems to comply with recommendations we will be limited adjusting schedules and allowing some areas of turf to go dormant during the summer months.**

• **Expected Results of Implementation: Reduction of consumption, meeting or exceeding guidelines.**

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Reduction of irrigation watering schedules during the months of August and September. Preliminary results show positive reduction amounts.**

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

• **Potential Challenges/Concerns: Facilities are upgraded to meet or exceed reduction targets during renovations and construction projects. Other projects to install conservation measures may be hampered by budget constraints.**

• **Expected Results of Implementation: Over time new and renovated facilities will enhance other conservation efforts.**

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators

- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

h. *Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses*

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

i. *Underserved Communities*

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

- If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

2. *Share Your Achievements - Conservation and Curtailment Actions in 2015*

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here. [Click here to enter text.](#)

3. *Prepare for Next Steps*

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Department of Fish and Wildlife***

Point of Contact: Bill Herber, Deputy Director for Administration

Phone Number: 503.947.6031

E-mail Address: bill.herber@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: We will be deploying signage at all of our facilities to encourage staff and the public to conserve water for everyday tasks. We will also track water consumption and notify all of our locations of those results routinely to further their effort, either by encouraging them to meet their goals or striving for them to do more.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: We will participate in statewide efforts for outreach and signage utilizing the WRD website. We would like to receive assistance with any outreach materials that may be developed at the state level. Our agency outreach contact is Rick Hargrave, Acting Information and Education Administrator, Richard.J.Hargrave@coho2.dfw.state.or.us

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:*

- *Expected Results of Implementation:* We anticipate to fully address public messaging for water conservation efforts within our agency.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Signage to encourage water conservation has been deployed for agency personnel at many of our facilities.

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

Our agency has implemented numerous non-essential water conservation measures within our facilities. For facilities that utilize well- or spring-fed water sources, we have significantly reduced non-essential water use. Specific details are described in the sections below. In addition, we have addressed conservation methods for various essential functions as well. For example, in hatcheries ODFW revised and implemented hatchery-specific *Emergency Water Conservation and Curtailment Plans* to decrease non-essential water usage and maximize instream flows. ODFW also began tracking this as a result of the Governor's Executive Order. Some specific actions taken at hatcheries includes: the use of aerators water re-circulation rationed domestic water use fish transfers between hatcheries ODFW assisted with the evacuation of the entire Warms Spring Tribal/US Fish and Wildlife hatchery production (adults and juveniles) to Little White Hatchery, WA

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* A major challenge is that 75% of our water consumption is not on metered water sources, making tracking difficult to obtain baseline numbers.

• *Expected Results of Implementation:* We anticipate all goals will be met in this regard.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Our Administrative Services Division has begun tracking water usage at facilities where water consumption is managed through public utilities. In addition, our Fish Division is tracking usage across the agency for other water sources. We have performed leak testing and repair for water distribution at our headquarters and various remote facilities.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: watering at night for trees and shrubs during the summer months

• *Potential Challenges/Concerns:* It is difficult to maintain trees and shrubbery from loss with low water levels. Lawns without sufficient irrigation are prone to weed infestation which requires additional maintenance. Water features that have been turned off now represent a safety hazard due to large unfilled holes as well as collecting run-off water that quickly turns stagnant and must be dealt with. Earlier in the year, not irrigating lawns caused concerns for fire dangers in some remote facilities.

• *Expected Results of Implementation:* We anticipate all goals will be met in this regard.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: We have turned off all water features within the agency. Irrigation for lawns has been completely reduced, except for trees and shrubs that provide habitat for wildlife. Watering schedules have been reduced to the bare minimum to support tree and shrubbery life.

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* Unanticipated costs for retrofitting existing buildings will have to be incorporated into program budgets. We have noticed increased wear and tear on building materials that are not routinely maintained (i.e. tile and grout).

• *Expected Results of Implementation:* We anticipate all goals will be met in this regard.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: In facilities with automatic faucets, we have ensured flow rates are within acceptable standards.

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (i.e., dishwashers, pre-rinse spray valves, ice machines, etc.) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* Unanticipated costs for retrofitting existing buildings will have to be incorporated into program budgets. We have noticed increased wear and tear on building materials that are not routinely maintained (i.e. tile and grout).

- *Expected Results of Implementation:* We anticipate all goals will be met in this regard.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: We have limited the use of dishwaters for large functions, and only running full loads through them.

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (except as necessary for health and safety purposes)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (investigate the feasibility of only using cleaning agents)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* Public perception to what appears to be dirty/un-maintained buildings.

- *Expected Results of Implementation:* We anticipate all goals will be met in this regard.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: We have reduced the water usage for building maintenance across our agency, effectively limiting the amount of building maintenance performed with water. Much of the maintenance is now performed with non-water means, i.e. cleaning exteriors with dry brooms.

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* Limited washing of vehicles is detrimental to the vehicle paint and clear coat. There is concern over public perception of dirty/unkept vehicles.

- *Expected Results of Implementation* We anticipate all goals will be met in this regard.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: We have severely limited (well over 50%) vehicle and equipment maintenance with water.

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:*

- *Expected Results of Implementation:* Staff will be more informed of water reduction efforts and have the ability to reduce water consumption at facilities.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Various staff within the agency have been further trained by vendors on how to more efficiently utilize building infrastructure to reduce water usage.

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)

Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:*

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

Alsea Hatchery
Astoria Field Office
Baker District Office
Bandon Hatchery
Bend Deschutes District Office
Big Canyon Hatchery
Big Creek Hatchery
Bonneville Hatchery
Butte Falls Hatchery
Cascade Hatchery
Cedar Creek Hatchery
Charleston District Office
Clackamas Hatchery
Cole Rivers Hatchery
Coos Bay Research Office
Corvallis Research Laboratory
EE Wilson Wildlife Area Office
Elk River Hatchery
Elkhorn Wildlife Area
Enterprise Field Office & Screen Shop
Fall River hatchery
Fern Ridge Wildlife Area
Gnat Creek Hatchery
Gold Beach District Office
Grants Pass Research Office
Headquarters ODFW
Heppner District Office
Hermiston Fish research Office
Hines District Office
Irrigon Hatchery
Jewell Meadows Wildlife Area
John Day Field Office
John Day Screen Shop
Klamath Hatchery
Klamath Wildlife Area
Klaskanine Hatchery
Ladd Marsh Wildlife Area
LaGrande Fish Research Office

Lakeview field Office
Leaburg Hatchery
Lookingglass Hatchery
Marine Resources Program Office
Marion Forks Hatchery
McKenzie Hatchery
Morgan Creek Hatchery
Newport Field Office
Noble Creek Hatchery
North Coast Watershed District
North Nehalem Hatchery
North Willamette Watershed District Office
Oak Springs Fish Hatchery
Ontario Field Office
Oregon Hatchery Research Center
Oxbow Hatchery
Pendleton District Office
Phillip Schneider Wildlife Area
Prineville Field Office
Roaring River Hatchery
Rock Creek Hatchery
Rogue Watershed Dist Office
Round Butte Hatchery
Salmon River Hatchery
Sandy Hatchery
Sauvie Island Wildlife Area
South Santiam Hatchery
South Willamette Watershed District Office
Springfield Field Office
Sublimity Field Office
Summer Lake Wildlife Area
The Dalles Field Station
The Dalles Screen Shop
Trask Hatchery
Trout Creek/Madras Field Station
Tuffy Creek Hatchery
Umatilla Hatchery
Umpqua Watershed District Office
Wallowa Hatchery
Wenaha Wildlife Area
White River Wildlife Area
Willamette Hatchery
Wizard Falls Hatchery

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Oregon Department of Transportation*

Point of Contact: Raymond Mabey
Phone Number: (503) 986-3570
E-mail Address: raymond.mabey@odot.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

ODOT GENERAL REDUCTION STRATEGY

ODOT has a large number of owned and leased buildings located throughout the state. In addition, ODOT also maintains the state highway system which includes irrigation on portions of the highway right of way. Due to these factors, ODOT potentially has a higher water use in comparison to other state agencies noted in the Governor's executive order.

Water uses at ODOT owned and leased buildings include but are not limited to:

- Landscape irrigation
- Restrooms
- Drinking fountains
- Kitchen / breakrooms
- Building maintenance
 - Window washing
 - Floor mopping
 - Walkway power washing

ODOT also uses water in its maintenance of the state highway system. These uses include but are not limited to:

- Right of way irrigation (interchanges and safety rest areas)
- Environmental mitigation sites
- Water quality features
- Maintenance of the light and heavy fleet

- Regular maintenance activities
 - Sweeping
 - Bridge washing
 - Median barrier scupper cleaning
 - Invasive species management
 - Dust abatement

For its buildings ODOT will establish a total baseline water use and from that identify and quantify its baseline non-essential water use to meet the 15% reduction goal set forth in the EO. ODOT will also coordinate with the owners of its leased building to take similar measures.

Common reduction actions will be required for all ODOT Divisions, however because the different Divisions within ODOT have slightly different water uses, they will identify, track, and report additional actions specific to their business lines. These actions will be added to the agency's overall plan. In order to promote local ownership and control, each Division will appoint a Water Manager to be the point of contact and to track and report their efforts. Some Divisions may appoint more than one Water Manager.

Further water use reductions will be sought from finding efficiencies and establishing new best management practices in the maintenance of the state highway system. These reductions, where quantifiable, will be accounted for separately.

In addition to reducing irrigation dependent landscaping at ODOT's buildings, ODOT will also examine its planning and design of landscaping along its highway ROW and make adjustments to drought resilient landscaping where feasible.

Potential Challenges / Concerns

Establishing baseline water use will require a Basis of Baseline document that describes what the baseline will and will not include. For example, unmetered wells may not be included in the initial baseline, nor will uses that are billed on a flat rate basis. Unmetered well volume will need to be estimated to determine if it is significant enough for inclusion in the baseline. At this time flat rate usage is estimated to be less than 2% of total water usage.

ODOT maintenance field offices are generally compounds that consist of many buildings all on one meter. Maintenance uses water in these compounds for maintenance activities and typical building use. It will be difficult to separate the maintenance use from the typical building use to establish a building baseline.

Water usage isn't metered separately for essential and non-essential use in buildings and compounds. Therefore, ODOT will not be able to quantify non-essential use and reductions with a high degree of accuracy.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide messaging for signs and outreach materials at a later date).
- Website (intranet web page), Inside ODOT (internal employee newsletter), Ask ODOT (internal employee help-line), FAQ, informational flyer, all employee e-mail status update
- Messaging to focus on non-essential water usage in the workplace and at home
- Consider possible water reduction competition between work units
- Recognize and reward conservation ideas
- Outreach to employees and visitors where we continue to use water that might appear to be non-essential use
- Create video message from Matt Garrett (conserve, reuse).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

Dave Thompson, PH: 503-986-4180; email: david.h.thompson@odot.state.or.us

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template - outreach materials at a later date.)
- External webpage (messaging, updates, accomplishments)
- Flyers at front desks for use
- Signage where lack of irrigation is evident – explanatory
- Stakeholder update (list serve notifications)
- Social media outreach (intermittent posts explaining how we are meeting Executive Order)
- YouTube video showing specific facility examples of water reduction
- Ask ODOT for citizen inquiries and comments
- Outreach to Area Commissions on Transportation and media specifying our water reduction actions in drought stricken communities, as appropriate
- Outreach to communities where we continue to use water that might appear to be non-essential use
- Outreach to federal and other state agency partners

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other: Leak protocols are addressed in Section B 1 a

Share with building owners what the agency is doing to reduce non-essential water use. Identify with them non-essential uses and how to reduce

• *Potential Challenges/Concerns:*

- Some building owners may require renegotiation of lease to address this
- Building may be occupied by more than just ODOT and other tenants may not want to participate
- Building owners may not want to participate

• *Expected Results of Implementation:*

- Increased awareness of need
- Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency.
- Energy and water efficiency improvement in ODOT leased buildings.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Refer to appropriate areas of Section B for actions already implemented

DRAFT

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other:

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited and will continue to be expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

Encourage employees to notify facility managers and/or Ask ODOT on leaks, inefficiencies or other perceived wasteful water use

Use agency accounting data to perform analysis on water use

• *Potential Challenges/Concerns:*

Water sources not currently metered will be evaluated and installed based on a cost/benefit analysis. Installation plan and funding request will be created when priorities are established. This will require additional time and resources.

ODOT will actively influence areas that we do not own or control to encourage water conservation.

Additional inspections will be incorporated during quarterly building safety inspections which will increase the time spent at each property, requiring training, and a change in processes.

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

- *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Multiple building leaks were detected and repaired at Estacada Maintenance Station.

Irrigation leak repairs to Gateway property in Springfield.

In the Materials Lab, the materials testing tank was changed to a more efficient closed loop system which reuses water and reduces total water consumption.

Performing quick response and repair of all reported water-related issues.

Conducting regular inspection of building water supply systems and water vaults for anomalies in Willamette area.

Fall 2014: The Juntura Maintenance Station installed a floor drain water collection and treatment system, which was placed into service this spring. The treated water is used for herbicide mixing and other general water applications. This water would otherwise be discharged to a surface drainage ditch.

All new and major renovation projects will include the use of high efficiency and low-water equipment.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other:
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other:

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

Check for leaks in primary irrigation system valves and distribution lines.

Adjust system to minimum specified pressure, install pressure regulators where required.

Verify that automatic irrigation controls and timers function correctly.

Verify that irrigation schedules are appropriate for time of day, climate, soil condition, plant material, grading, and season.

Inspect and maintain back-flow prevention devices.

• *Potential Challenges/Concerns:*

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

Irrigation systems are not metered separately so to determine usage and savings will be difficult.

Verification of implementation will be difficult due to wide-spread and remote location of areas and conflicting urgent job priorities.

Contracts for janitorial, window washing, power washing, and landscaping will need to be revised to reflect new standards which will effect contract negotiations and provider availability.

Installing automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering are not appropriate for all areas but will be considered where feasible.

• *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Added to design criteria for new facilities will include xeriscape landscaping, elimination of non-essential landscaping, and including automated irrigation controllers.

Will consider automated systems after cost/benefit analysis and climate appropriateness.

ODOT does not routinely use decorative fountains but when found will be eliminated.

Increase the frequency of irrigation systems maintenance during peak irrigation season.

Repair all leaks, otherwise cap off or close any irreparable breaks or significant breaks at the nearest location.

Landscape watering was curtailed at three major facilities in the Salem area; will expand to additional buildings as appropriate.

Landscape watering at the Materials Lab Building in Salem was reduced by 50 percent at the beginning of the summer by limiting irrigation times.

In June 2015, the East Salem complex disconnected a portion of its irrigation system after leaks were detected. Next steps are under review.

Instituted watering schedules at Region 5 employee housing locations; will expand to additional buildings as appropriate.

The renovation of the Transportation Building (ODOT headquarters) included the installation of native species that reduce irrigation needs.

Construction of ODOT's Region 4 Technical Center and the Bend DMV remodel (2013) involved installation of more than two acres of low maintenance (drought tolerant) native seeding and plants. A drip irrigation system was installed for efficient landscape irrigation during the period of plant establishment.

Select use of mulch or other moisture retaining products around trees and larger vegetation to reduce evaporation.

Irrigation repairs were to Gateway property in Springfield.

All new and major renovation projects will include the use of high efficiency and low-water equipment.

Remove current landscape at Mill Creek and install drought tolerant plantings and landscape rocks.

c. Restroom / Shower Facilities

Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*

Retrofit/replace older, inefficient toilets with low-flow or dual-flush models

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

- *Potential Challenges/Concerns:*

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

Contracts for janitorial, window washing, power washing, and landscaping will need to be revised to reflect new standards which will effect contract negotiations and provider availability.

Verification will be difficult due to wide-spread and remote location of areas and conflicting urgent job priorities.

Local water quality could impact efficiency and use of low-volume water equipment due to mineral and biological content buildup; offset filtering devices would be required at additional cost and may, depending on the existing system, require additional maintenance.

- *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Recent renovation of the Transportation Building (ODOT headquarters) included a large roof area (14,745 SF) that now drains to a rainwater collection system with a 10,000 gallon storage capacity. This system provides more than 100,000 gallons of treated water annually for use in flush fixtures on two floors of the building, displacing an equal amount of potable water usage. High efficiency plumbing fixtures were installed throughout the

building. Our calculations show these sensor fixtures reduce potable water consumption by more than 30 percent when compared to a standard code building.

Construction of ODOT's Region 4 Technical Center and the Bend DMV remodel (2013) included fully upgraded, low flow restroom fixtures.

Low flow toilets with pressure assist were installed at Mill Creek Office Building.

Water saving auto-faucets were installed in the restrooms of Building B on the East Salem complex, one of the largest buildings in the complex.

Beaver Marsh Safety Rest Area (Region 4) was recently upgraded with all new water saver toilets, auto sensor faucets, and freeze proof, auto-off drinking fountains.

Last year the Brothers Oasis Safety Rest Area converted to a waterless facility. The landscaping was changed to not need water and the toilets were converted to waterless fixtures.

Requiring all remodels involving restrooms/plumbing systems to include replacement of existing fixtures to efficient models.

Partnering with the Energy Trust of Oregon and local utilities related to faucet and shower aerator replacement; incentive to off-set cost.

Installing restroom faucets with those that only use 0.5 GPM; completed at Region 2 Headquarters, Mill Creek, DMV Headquarters.

Installing shower heads with those that only use 1.5 GPM; completed at DMV Headquarters.

Adjusting fixtures to use minimum amount of water for proper function.

Install toilet tank water displacement devices, such as toilet dam, bags, or weighted bottles.

Repair leaking toilets, leaking or dripping faucets or shower heads when identified or reported.

All new and major renovation projects will include the use of high efficiency and low-water equipment.

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other:

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

- *Potential Challenges/Concerns:*

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

Verification will be difficult due to wide-spread and remote location of areas and conflicting urgent job priorities.

Local water quality could impact efficiency and use of low-use water equipment due to mineral content buildup; offset filtering devices would be required at additional cost.

Understanding and inventorying what is currently existing and targeting priorities for replacement which will take additional time and resources.

Due to age and style, existing sinks and faucets may not be able to be retrofitted.

Many facilities have antiquated faucets and may not accommodate aerators; retrofitting faucets will require professional plumbing services which would impact prioritization and funding request.

Ongoing education on importance of maintaining and cleaning water restriction devices to ensure proper function and continued use and will require additional resources.

Contracts for janitorial, window washing, power washing, and landscaping will need to be revised to reflect new standards which will effect contract negotiations and provider availability.

- *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

All appliances purchases for employee housing, including dishwashers, meet ENERGY STAR® standards.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Insta-Hot devices were installed in many office building breakrooms to reduce the waste of running water until it's hot.

Insta-Hot will be installed in additional locations where practical and appropriate.

Financial Standards now require ENERGY STAR® refrigerators be purchased (without ice maker).

All appliances purchases for employee housing, including dishwashers, meet ENERGY STAR® standards.

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

Actively coordinating with Energy Trust on a pilot for use of aerators; evaluating the best practices and lessons learned for expanded use in other locations.

Installing missing aerators discovered on routine facility condition inspections conducted every three years.

All new and major renovation projects will include the use of high efficiency and low-water equipment.

e. *Laundry Facilities*

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other:

There are a small number of laundry appliances; however staff are encouraged to reduce use of water.

High use non-ENERGY STAR® appliances will be considered for equipment upgrades.

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

• *Potential Challenges/Concerns:*

Employee housing laundry appliances are provided by the employee/renter and cannot be dictated by the owner/ODOT, however will be included in education outreach.

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

Verification will be difficult due to wide-spread and remote location of areas and conflicting urgent job priorities.

Local water quality could impact efficiency and use of low-use water equipment due to mineral content buildup; offset filtering devices would be required at additional cost.

• *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

All new and major renovation projects will include the use of high efficiency and low-water equipment.

All appliances purchases meet ENERGY STAR® standards.

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other:

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

- *Potential Challenges/Concerns:*

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

Contracts for janitorial, window washing, power washing, and landscaping will need to be revised to reflect new standards which will effect contract negotiations and provider availability.

Verification will be difficult due to wide-spread and remote location of areas and conflicting urgent job priorities.

- *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Investigate the feasibility of only using cleaning agents; low-water methods will be considered as an option.

Adjusted window cleaning schedules to “as required” rather than “periodic”.

Power washing only used to alleviate safety or sanitary hazards.

Maintenance staff (located through the Facilities Management headquarters) will routinely look for potential water issues when performing any work.

All new and major renovation projects will include the use of high efficiency and low-water equipment.

g. *Equipment Maintenance*

Reduce vehicle washing by 50% (or eliminate), **except** for:

- vehicles washed in a facility using recycled water
- vehicles that must be washed to maintain public health and safety
- vehicles that must be washed to prevent the spread of invasive species
- vehicles that must be washed to prevent rusting or other maintenance issues
- vehicles washed only with cleaning agents (i.e., no water)

Other:

Incorporate review of water equipment and usage into facility inspections which occur every three years. Replace equipment as appropriate during facility inspection.

Work order requests are expedited for all water systems issues identified.

Require active participation from Facilities staff and other occupants in identifying water issues and report for corrective action.

• *Potential Challenges/Concerns:*

Replacement equipment will be prioritized based on usage and budget.

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

Contracts for janitorial, window washing, power washing and landscaping will need to be revised to reflect new standards.

Verification will be difficult due to wide-spread and remote location of areas and conflicting urgent job priorities.

• *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

All new and major renovation projects will include the use of high efficiency and low-water equipment.

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: Outreach materials mentioned in A 1

Most education would occur in on going work unit staff meetings

For contracted grounds/building maintenance, contract reviews would be made as appropriate.

- *Potential Challenges/Concerns:*

Change in the culture and behaviors of users will require dedicated efforts and will take time.

Identify and train local personnel to perform work which results in additional duties will be imposed on staff who may not have available time.

- *Expected Results of Implementation:*

Reduce waste and cost due to timely repair.

Increased awareness of need.

Change in the culture to reduce usage and create better stewards of water use and environment, energy efficiency, as well as asset protection of state resources.

Energy and water efficiency improvement in ODOT buildings and operations save ODOT money.

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

- If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.*

Reduction measures that could impact the general public (mainly outside of buildings) will be evaluated for disproportionate effects to local EJ communities if they exist.

- Other:

- *Potential Challenges/Concerns:*

Additional studies may be required to establish the existence of a local EJ community.

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

DRAFT

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Youth Authority***

Point of Contact: Rex Emery
Phone Number: [503-986-0303](tel:503-986-0303)
E-mail Address: rex.emery@oya.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

OYA will:

- Prepare and place posters in all work locations (owned and leased) to encourage employees, youth, and visitors to minimize non-essential water use;
- Write and issue a series of all-staff emails from the Director explaining the need for reducing water use;
- Write and issue a series of service area messages from the Assistant Directors; and
- Post information on the agency intranet to provide tips for reducing water use at work and home.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

OYA will:

- Post information on the agency's public website to describe and promote the agency's water-saving actions; and
- Issue copies of the all-staff emails to stakeholder groups (e.g., advisory committees) explaining the agency's actions to minimize non-essential water use.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other:

OYA will add water conservation language to all leases.

OYA also will:

- Prepare and place posters in all work locations (owned and leased) to encourage employees, youth, and visitors to minimize non-essential water use;
- Write and issue a series of all-staff emails from the Director explaining the need for reducing water use;
- Write and issue a series of service area messages from the Assistant Directors; and
- Post information on the agency intranet to provide tips for reducing water use at work and home.

- *Potential Challenges/Concerns:* None identified.

- *Expected Results of Implementation:* TBD

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Immediate measures already implemented include: The EO has been reviewed and initial conversations have occurred with PPO staff for training purposes, to outline immediate measures expectations, and to ask for their support and ideas. OYA has developed plans for each facility to stop irrigation outside the secure perimeter. The only irrigation allowed is for youth areas within each close-custody facility.

Watering is now limited to outdoor recreation areas within the secure perimeter. PPO has banned using hoses without shutoff nozzles, and banned using pressure washers on sidewalks and roads through the

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summer months. Agency purchasers have starting to measure and record water use at each OYA facility. (This already occurs at some locations; OYA is working on implementing this at all facilities.)

OYA sent a letter August 10 to OYA's architectural and engineering consultants directing them to include water conservation discussions and research in all design efforts for OYA. PPO construction managers will include water conservation in conversations with contractors at value engineering and planning sessions. These steps will help ensure the 10-Year Strategic Plan for Facilities includes opportunities for water savings in all new and renovated buildings. New contracts will have water savings boilerplate language. OYA already buys water-efficient equipment and fixtures.

An all-staff Director's Message will be issued during October 2015 to introduce the topic of water conservation, explain the Executive Order, and provide links to additional information. A message from the Director will be issued during October 2015 directing all facilities to implement immediate measures and develop long-term measures.

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
 - Locate leaks and repair in a timely manner*
 - Meter water sources (*if not already metered*)
 - Institute a meter installation, testing and maintenance/replacement program
 - Other: Add indoor and outdoor water distribution system audits at PPO quarterly facility site visits.
- *Potential Challenges/Concerns:* Email was sent September 22 directing all purchasers to track water meter data.
 - *Expected Results of Implementation:* TBD
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:
The first audits of Hillcrest, MacLaren, Eastern Oregon and RiverBend facilities were completed in September 2015. Communications (posters, messages, and online content) are in development and will be rolled out beginning in October 2015.

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: Irrigation has been stopped for all exterior lawn areas. Water will continue in the limited recreation areas for youth with in youth correctional facility secure perimeters.
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)

- **Potential Challenges/Concerns:** Water features at Hillcrest high school, Thayer Hall at MacLaren, and Oak Creek YCF are provided for youth treatment purposes. Emptying the fixtures without removing them entirely would create an eyesore within the limited area that youth have for treatment-oriented spaces.

- **Expected Results of Implementation:** TBD

- **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: OYA has identified water features to close and will maintain only small decorative ponds that use very little water and serve to supplement youth treatment. These small water features provide a touch of a normative environment and are used in helping youth learn to regulate their emotions without being violent or using substances. No new water-scapes will be installed.

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: OYA will be communicating the expectation to staff and youth that the water is to be turned off while brushing teeth and shaving. The agency also will limit shower times to 5 minutes per youth. With approximately 650 youth in custody, this should achieve significant savings in the area. OYA also will begin replacing existing showerheads with low-flow versions.

- **Potential Challenges/Concerns:** Faucet aerators are not practical in correctional settings as they are easy to remove and create contraband a nuisance.

- **Expected Results of Implementation:** TBD

- **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: When purchasing new equipment and fixtures, OYA already has a practice in place to choose items based on water conservation features.

d. Break Room / Kitchen Facilities

- Inspect break room/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: In the break room and kitchen areas, OYA will be training staff and youth to not let the water run while washing dishes, to only run full loads in the dishwashers, and to put solid food waste in the trash in place of using water to wash the waste down the disposal.

- *Potential Challenges/Concerns:* Increased waste removal for the solid food waste. OYA will look into the possibility of composting for the facility gardens.
- *Expected Results of Implementation:* TBD
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: Most if not all close-custody living unit kitchens have a sprayer that is used to clean dishes prior to going into the dishwasher. The sprayer allows the water to not run continuously as youth and staff do the initial dishwashing.

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* None identified.
- *Expected Results of Implementation:* TBD
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: OYA has purchased Dexter brand water-miser clothes washers and other water efficient, Energy Star laundry machines. Water savings are achieved in many OYA locations by using front loader machines that use up to 70% less water. The Dexter front loader machines in OYA facilities have a sump-free washer design and flexible water usage settings to help reduce water consumption.

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* None identified.
- *Expected Results of Implementation:* TBD

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- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: OYA has reduced the use of pressure washing and eliminated it where possible.

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
- vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)

Other:

- *Potential Challenges/Concerns:* None identified.
- *Expected Results of Implementation:* TBD
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: OYA has minimized the frequency with which vehicles are washed.

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions

Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* None identified.
- *Expected Results of Implementation:* TBD
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: OYA will look for training opportunities.

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)

Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* N/A

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

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PPO staff have been briefed on the EO, informed of expectations, and are sharing those expectations with other OYA staff on an ongoing basis. OYA already has a practice in place of purchasing energy-efficient and low-water-use equipment and fixtures for use at its close-custody facilities. OYA has stopped irrigating grounds outside the secure perimeter at its fenced facilities. Watering is now limited to outdoor youth recreation areas within the secure perimeter. OYA has banned using water hoses without shutoff nozzles, and banned using pressure washers on sidewalks and roads. Window washing and vehicle washing are kept to a minimum. Youth are expected to turn off water while brushing teeth and shaving, and to limit showers to 5 minutes. Agency purchasers have begun to measure and record water use at each OYA facility.

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.* OYA operates 10 close-custody facilities and 26 Probation and Parole offices located throughout Oregon. These properties represent a combination of owned and leased physical plants comprising more than 50 separate structures.

[Eastern Oregon Youth Correctional Facility](#)

1800 West Monroe
Burns, OR 97720
Information: 541-573-3133
FAX: 541-573-3665

[Hillcrest Youth Correctional Facility](#)

2450 Strong Road SE
Salem, OR 97302-9676
Information: 503-986-0400
FAX: 503-986-0406

[MacLaren Youth Correctional Facility](#)

2630 North Pacific Highway
Woodburn, OR 97071-8999
Information: 503-981-9531
FAX: 503-982-4439

[Oak Creek Youth Correctional Facility](#)

4400 Lochner Road SE
Albany, OR 97322
Information: 541-791-5900
FAX: 541-791-5937

[Camp Florence Youth Transitional Facility](#)

04859 South Jetty Road
Florence, OR 97439-8531
Information: 541-997-2076
FAX: 541-997-4217

[Camp Riverbend Youth Transitional Facility](#)

58231 Oregon Highway 244
La Grande, OR 97850-7240
Information: 541-663-8801
FAX: 541-663-9181

[North Coast Youth Correctional Facility](#)

1250 SE 19th
Warrenton, OR 97146
Information: 503-861-7190
FAX: 503-861-9543

[Rogue Valley Youth Correctional Facility](#)

2001 NE F Street
Grants Pass, OR 97526-4813
Information: 541-471-2862, ext. 221
FAX: 541-471-2861

[Tillamook Youth Correctional Facility](#)

6700 Officer Row
Tillamook, OR 97141-8903
Information: 503-842-2565, ext. 221
FAX: 503-842-4918

[Camp Tillamook Youth Transitional Facility](#)

6820 Barracks Circle
Tillamook, OR 97141-9683
Information: 503-842-4243
FAX: 503-842-1476

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Oregon Parks and Recreation Department***

Point of Contact: Eric Timmons – Central Operations Support Manager

Phone Number: [503-390-0639](tel:503-390-0639) x225

E-mail Address: eric.timmons@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: **Staff is educated on the need to conserve water through postings, newsletters, and direct communications from the agency's sustainability team.**
- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: **Education through the agency website, postings in areas where water is consumed, and in camp programs.**
- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.
- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use
- Other:

• *Potential Challenges/Concerns:* **Reducing the amount of irrigated land in recreational areas may be met with resistance as some visitors specifically go to the parks to find green spaces to recreate. In some locations on the east side of the state, camping and day use visitors' numbers will decrease if irrigation is totally stopped. In other areas education and awareness will lessen the impacts.**

• *Expected Results of Implementation:* **The increased of awareness will result in staff looking for efficiencies and ways to reduce water consumption. Impacts on the general public's willingness to conserve will depend on the individual park users. Some will do it because they want to and others may not as it is not in their mindset.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **An article in our internal newsletter and several emails has raised staff awareness. Posters have been placed in several key locations as to educate the general public. Reductions from staff should be significant. Impacts from the general public are hard to predict.**

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:*

OPRD has many miles of problematic waterlines that are past their useful lifespan. While we look for leaks and monitor the meters, it is not always possible to spot the small leaks. The cost of replacing all the aged waterlines is excessive. Another challenge is that not all of our restroom facilities have plumbing that is capable of using most efficient low flow devices. OPRD continues to make improvements to septic systems as funding allows.

• *Expected Results of Implementation:* **This is one of the areas where staff can make a significant difference. We expect that the increased awareness will encourage staff to actively seek out leaks and make necessary repairs, more closely monitor consumption, and seek ways to lower their usage.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **OPRD required all management units to report on all sources of water, type of use, meter status, and any known issues. A staff member has been assigned to work with each of the parks that reported issues to seek ways to resolve metering issues. We are also taking a hard look at how the data is entered in order to ensure consistency since there are several variances to the way municipalities bill for usage. It is too early to estimate any savings.**

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)

• **Potential Challenges/Concerns:** OPRD's irrigation systems are considered antiquated compared to today's systems. While they are fairly reliable, they are not as efficient as new systems. These can be extremely large systems and expensive to replace.

• **Expected Results of Implementation:** We predict a significant decrease in water use as a result of prohibiting irrigation of non-essential areas. Areas deemed as essential will also see decreases as we are reducing the overall size of the areas, the frequency of watering, and amount of water applied.

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Immediate ban on all non-essential irrigation as of August 2015 and a full scale review of any irrigation performed on essential areas (in progress).** Water savings for irrigated areas should exceed 20%.

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
- Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
- Install faucet aerators
- Install low-flow showerheads
- Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

• **Potential Challenges/Concerns:** OPRD has over 350 plumbed restrooms with an average build date in 1983. At least 85 of these restroom shower facilities are at least 50 years or older. While some efficiency can be made at these facilities, older plumbing does not always allow for the latest low flow devices.

• **Expected Results of Implementation:** Some savings will be obtainable but the majority of locations that can use low flow fixtures are already taking advantage of the savings. OPRD will continue to retrofit other restrooms as funding allows.

• **Actions Already Implemented in 2015:** Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Staff is being trained in the use of safe cleaning methods that will significantly reduce the use of water used during the daily cleaning of restrooms and showers. The training is designed in coordination with our Green Chemical program.**

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
- Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
- Install faucet aerators
- Install an instant hot water dispenser to reduce time water is runs while heating up
- Run only full loads in dishwashers
- Reduce frequency of mopping with water, except as needed for public health and safety
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* **OPRD has a minimal amount of plumbed break rooms. Very little impact can be made in this area.**

• *Expected Results of Implementation:*

Minimal savings due to limited breakrooms.

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Employee awareness**

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
- Reduce the frequency of washing (*except as necessary for health and safety purposes*)
- Run only full loads in washing machines
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* **OPRD has a few laundry stations at large parks with campgrounds and for limited staff use. While we can reduce the use by staff, reduction of use by park visitors may be hard if the visitation continues to increase.**

• *Expected Results of Implementation:* **Water savings may be minimal as a result of the low frequency of use by staff and increase in park visitors.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **Education of staff and posting of educational posters located in the parks.**

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* **OPRD buildings are generally not the type that require large scale window washing or regular pressure washing.**

• *Expected Results of Implementation:* **Minimal impacts**

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None**

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)

Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* **Non-water chemical cleaning agents may increase overall chemical use.**

• *Expected Results of Implementation:* **A minor reduction in the amount of times vehicles are washed by hand.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **None**

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions

Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* **None**

• *Expected Results of Implementation:* **A significant savings in the amount of water used to clean and maintain OPRD facilities.**

• *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: **A section on water savings is being incorporated into the Restroom Cleaning Standards training we are developing and implementing this winter.**

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated. * **OPRD will take into consideration the level of impact, if the service is provided elsewhere in close proximity, and if other avenues can fill the need. An example would be at the Capitol State Park where we reduced the hours of the fountain and applied environmental limits on when the “Wall of Water”: would run.**

Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* **Being able to readily identify the social impacts in areas such as rural eastern parks if irrigation is stopped in areas where it has significant impact on their recreational experience.**

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here.

Curtailment of all non-essential irrigation, updating irrigation plans for essential lands, and increased staff and public awareness.

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.* **This list is extensive and will take additional time to compile. OPRD has 1800 buildings statewide and 256 park lands.**

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: ***Public Utility Commission***

Point of Contact: David Poston

Phone Number: [503-378-6661](tel:503-378-6661)

E-mail Address: david.poston@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

Explain how you will encourage voluntary actions to conserve water:

- 1.) Post signs near bathroom and kitchen sinks to encourage staff and the public to conserve water; 2.) Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- 3.) Place information on our agency Intranet for staff reference, and send out periodic reminders to staff;
- 4.) Advise the building owner of the State water conservation program. 5.) Work with the building owner to encourage the installation of sensors for bathroom sinks, and other potential water saving features. 6.) Our agency has installed water filling stations to reduce the use of disposable bottled water (which often goes into the plastic waste stream, and impacts the environment), and create a more efficient method of providing water to staff with minimum waste.

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact

Our agency's outreach contact is Karla Hunter, phone# 503-373-0044, and we would like to take advantage of any assistance available with outreach materials. Karla will ensure water conservation information is posted on our agency's main website, which is available to the public. Karla will follow the template outreach materials when WRD and DAS make them available.

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

Provide water conservation information to private building owner if building is leased to your agency

Encourage owner to take steps to reduce water use

Other: A continued effort by the Public Utility Commission (PUC) to work with regulated water utility companies to promote the efficient use of water through efficiency enhancing rate designs. Oregon statutes provide the PUC with regulatory oversight for select types of water systems. For such systems, one objective of regulation is the efficient use of scarce resources such as water. The PUC has a Key Performance Measure (KPM) that tracks the rate of regulated water companies' compliance with efficiency enhancing rate designs. Currently, 95% of PUC regulated water utilities have water efficiency enhancing rate designs. There are at least two PUC rate regulated water systems that are not metered and the PUC will continue to look for opportunities to encourage the systems to add meters.

• **Potential Challenges/Concerns:** The Public Utility Commission (PUC) is located in a private building that includes two other agencies. Through our Tenant Advisory Group; we will work together to promote and encourage compliance from all staff. However, the PUC has limited control over compliance from the staff

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in the other two agencies. Also, the building has very limited landscaping, so little water is used for this purpose. There are also a limited number of sinks in the building. Most water is used for toilets, and sinks, which provide limited opportunities to reduce usage.

- *Expected Results of Implementation:* The expected outcome of implementation is a greater awareness amongst employees and the public that may help reduce usage in our building and possibly in individual households. A continued effort by the PUC to work with water utility companies to promote the efficient use of water through efficiency enhancing rate designs.
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: The PUC, as indicated above, has recently installed water filling stations to provide a more efficient method of providing water to staff with minimum waste. Also, the Public Utility Commission regulates water utility companies, and has a Key Performance Measure (KPM) that tracks these water utility companies' compliance with efficiency enhancing rate designs.

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Oregon Real Estate Agency](#)

Point of Contact: [Dean Owens – Deputy Commissioner](#)

Phone Number: [503-378-4407](tel:503-378-4407)

E-mail Address: dean.owens@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: [The Agency intends to provide water conservation information targeted to employees through the following: signage in staff break area and restrooms and tips and tools in staff e-newsletter and in monthly all-staff meetings.](#)

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: [The Agency intends to provide outreach materials on the Agency website, through the Oregon Real Estate News Journal and in publicly attended Board meetings. Please send materials to Agency contact.](#)

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [As a licensing and regulatory Agency the Agency of fewer than 30 staff in an office environment does not foresee opportunities for substantial direct water savings.](#)

- *Expected Results of Implementation:* [The Agency hopes to extend useful tools to employees and the public to reduce personal water consumption.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [The Agency recently moved to a new leased space in July 2015 which is exclusively equipped with high efficiency, low flow automated toilets. There is not a known estimate of water savings.](#)

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Oregon Department of Revenue](#)

Point of Contact: [Christine Cornish and Derrick Gasperini](#)

Phone Number: [Christine 503-947-2062 and Derrick 503-945-8565](#)

E-mail Address: Christine.cornish@oregon.gov and derrick.w.gasperini@oregon.gov

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: [Signs in Facilities to encourage state employees to reduce their non-essential water use.](#)

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: [Posting water conservation information on our website.](#)

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: *Oregon State Police*

Point of Contact: Rick Willis

Phone Number: 503 934 0225

E-mail Address: rwillis@osp.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

Response:

- ▶ Post information on the agency intranet to provide tips for reducing water use at work and home.
- ▶ Place signage in showers, break rooms and bathrooms encouraging water conservation; to include approximate amounts of water used when allowing faucet to run freely while brushing teeth, washing hands, etc..
- ▶ Engage staff and managers by requesting input on how to best identify and implement water conservation efforts on their sites, tailored to their geographic area and usage needs.
- ▶ Encourage employees to be attentive to water waste and to use available processes to alert landlords and Facilities groups to active leaks.
- ▶ Recommend landlord installation of water efficient fixtures in all sites on or before the 17/19 biennium
- ▶ Recommend OSP landlords and property managers develop and implement irrigation system spring start up standards (inspect for leaks, ensure irrigation system is running only between 8 PM & 7AM, etc.), monitor and adjust irrigation levels.
- ▶

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact:

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

Response

- ▶ Signage in public bathrooms encouraging water conservation.
- ▶ [Link on agency's website to WRD](#)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

Response

- ▶ OSP owns no buildings

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

Response

- ▶ Will encourage managers and staff to utilize existing processes for offices to alert Facilities of active leaks

- Provide water conservation information to private building owner if building is leased to your agency

Response

- ▶ DAS committed to send letter to all of our private sector Lessors encouraging water conservation, per DAS Leasing letter from Shannon Ryan dated 9 14, 2015

- Encourage our property owners to take steps to reduce water use

Response

- ▶ DAS to send letter to all of our private sector Lessors encouraging water conservation, per DAS Leasing letter from Shannon Ryan dated 9 14, 2015

Response

- ▶ Urge DAS to send a letter to meet with the AG's office to determine if water conservation language can be included in current leases, upon renewal and/or in new leases.

- Other:

- *Potential Challenges/Concerns:*

Response

- ▶ DAS to send letter to all of our private sector Lessors encouraging water conservation, per DAS Leasing letter from Shannon

Expected Results of Implementation:

Response

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:

Response

- ▶ New LaGrande and Astoria Area Command sites recently completed with low maintenance and reduced water consumption methods (drip system) and materials (native plants, reduced or no grass, use of non-water-consuming materials such as rocks and decorative gravel).

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▶ LaGrande move in Feb 2014 and Warrenton move in Sept 2015.

Dec 2014: 50% savings, approximately 4500 gallons

Dec 2015: 50% savings, approximately 1500 gallons

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Oregon Dept. of Veterans' Affairs](#)

Point of Contact: [Steve Reed](#)

Phone Number: [503-373-2110](#)

E-mail Address: reeds@odva.state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: [Signage in restrooms](#)

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: [Signage on our Memorial fountain to inform the Public about our water conservation measures and the limited use of the fountain.](#)

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices
- Provide water conservation information to private building owner if building is leased to your agency
- Encourage owner to take steps to reduce water use

- Other: [We will post signs in restrooms and janitor's closets to encourage conservation](#)

- *Potential Challenges/Concerns:* [NA](#)

- *Expected Results of Implementation:* [Heighten awareness to increase water use conservation](#)

- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [We no longer operate our Afghan/Iraqi memorial fountain. We have also replaced all our conventional faucet valves with ceramic valves that will eliminate most instances of leaks.](#)

Section B: To Be Completed By Agencies that Own Facilities and/or Land

1. Water Conservation Measures

Describe actions, improvements and/or programs the agency plans to implement (*or has implemented in 2015*) to reduce non-essential use of water, improve the efficiency of water use and promote water conservation. See *EO 15-09 Guidance Document #1* for assistance.

***Required by the Executive Order:**

- Curtail or end non-essential use of water for landscaping and other exterior actions.
- Moratorium on installing new non-essential landscaping that requires irrigation.
- Signage to encourage state employees to reduce non-essential water use in state-owned buildings (see Section A.)
- Leak assessment
- Consider any social and disproportionate effects of actions on underserved communities.

[Check all that apply]

a. Source and Conveyance / Distribution System

- Perform an audit of indoor and outdoor uses on a monthly or quarterly basis
- Locate leaks and repair in a timely manner*
- Meter water sources (*if not already metered*)
- Institute a meter installation, testing and maintenance/replacement program

Other: [DAS does our Landscaping and has already scaled back.](#)

- *Potential Challenges/Concerns:* [NA](#)
- *Expected Results of Implementation:* [NA](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result:
[Have installed ceramic faucet valves](#)

b. Irrigation and Other Landscaping Elements

- Turn off decorative fountains (*except for those that use recycled water*). At fountains using recycled water, provide explanatory signage (if possible)*
- Prohibit installation of new non-essential landscaping projects that would require irrigation*
- Reduce water used for irrigation* (*i.e., landscaping, pasture, crops, etc.*), as follows:
 - Install automatic shut-off valves, weather-based irrigation controllers, soil moisture sensors to prevent overwatering
 - Reduce the area to be irrigated and/or replace some of the lawn with xeriscaping
 - Adjust watering schedule throughout the season to match weather conditions
 - Capture rain water from roof or other impervious surfaces to irrigate landscape
 - Other: [Click here to enter text.](#)
- Use reclaimed/recycled water for irrigation in place of primary water source(s)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [DAS is responsible for our irrigation and Landscaping](#)

- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

c. Restroom / Shower Facilities

- Inspect restroom/shower facilities for leaks and, if any are found, fix immediately*
 - Retrofit/replace older, inefficient toilets with low-flow or dual-flush models
 - Install faucet aerators
 - Install low-flow showerheads
 - Maintain and properly calibrate automatic faucets and flush mechanisms to ensure they are functioning efficiently
 - Reduce frequency of mopping with water, except as needed for public health and safety
 - Other: [We do and have done the above](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
 - *Expected Results of Implementation:* [Click here to enter text.](#)
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

d. Breakroom / Kitchen Facilities

- Inspect breakroom/kitchen facilities for leaks and, if any are found, fix immediately*
 - Retrofit/replacement of inefficient water using fixtures/appliances (*i.e., dishwashers, pre-rinse spray valves, ice machines, etc.*) with more efficient, low-water use models
 - Install faucet aerators
 - Install an instant hot water dispenser to reduce time water is runs while heating up
 - Run only full loads in dishwashers
 - Reduce frequency of mopping with water, except as needed for public health and safety
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
 - *Expected Results of Implementation:* [Click here to enter text.](#)
 - *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

e. Laundry Facilities

- Retrofit/replacement of inefficient clothes-washing machines with more efficient, low-water use models
 - Reduce the frequency of washing (*except as necessary for health and safety purposes*)
 - Run only full loads in washing machines
 - Other: [Click here to enter text.](#)
- *Potential Challenges/Concerns:* [Click here to enter text.](#)
 - *Expected Results of Implementation:* [Click here to enter text.](#)

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- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

f. Building Maintenance

- Reduce the frequency of window washing with water
- Eliminate window washing with water (*investigate the feasibility of only using cleaning agents*)
- Reduce the frequency of mopping with water, except as needed for public health and safety
- Reduce or eliminate the frequency of pressure washing
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

g. Equipment Maintenance

- Reduce vehicle washing by 50% (or eliminate), **except** for:
 - vehicles washed in a facility using recycled water
 - vehicles that must be washed to maintain public health and safety
 - vehicles that must be washed to prevent the spread of invasive species
 - vehicles that must be washed to prevent rusting or other maintenance issues
 - vehicles washed only with cleaning agents (i.e., no water)
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

h. Additional Educational Programs that Promote Water Conservation and Reduction of Non-Essential Uses

- Provide training events for building maintenance staff to learn about specific indoor water saving equipment or actions
- Provide training events for grounds maintenance staff to learn about specific outdoor water saving equipment or actions
- Other: [Click here to enter text.](#)

- *Potential Challenges/Concerns:* [Click here to enter text.](#)
- *Expected Results of Implementation:* [Click here to enter text.](#)
- *Actions Already Implemented in 2015:* Identify actions and, if possible, include an estimate of the amount of water saved as a result: [Click here to enter text.](#)

i. Underserved Communities

EO 15-09 requires agencies to consider social and disproportionate effects of actions to conserve water on underserved communities in making decisions to reduce water use. See EO 15-09 Guidance Document #1 for more information.

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

If water-saving measures reduce services to the public, describe what your agency will do to consider whether reducing water use will have social or disproportionate effects on underserved communities, and if those impacts could be mitigated.* [Click here to enter text.](#)

Other: [Click here to enter text.](#)

• *Potential Challenges/Concerns:* [Click here to enter text.](#)

2. Share Your Achievements - Conservation and Curtailment Actions in 2015

This information may be used in outreach materials, websites, and reports to share what state agencies are doing. If your agency has already implemented conservation actions, improved water use efficiency, and/or enacted water use curtailment actions, please provide a narrative on those achievements here. [Click here to enter text.](#)

3. Prepare for Next Steps

Generate a list of facilities/properties owned by the agency that result in water use. *More information will be forthcoming.*

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: **Oregon Water Resources Department**

Point of Contact: Alyssa Mucken, Sustainability Coordinator

Phone Number: [503-986-0911](tel:503-986-0911)

E-mail Address: alyssa.m.mucken@state.or.us

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water:
 - The Water Resources Department will post signs in our buildings to encourage state employees to reduce non-essential water use. The Department of Administrative Services (DAS) owns and operates the North Mall Office Building where our main office is located. OWRD will coordinate with DAS to place signs in key locations throughout the building, including bathrooms, kitchens, and any custodial areas. OWRD will also distribute water conservation signs to all of our field offices.
 - The Department will continue to develop and distribute water conservation materials and other information using our website.
 - The Department will utilize an interagency “Green Team” to promote measures that can be implemented to reduce water and energy consumption. The Green Team will help develop a protocol for staff to easily report leaks, inefficiencies, and other wasteful water use practices to our facilities manager.
- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency’s outreach contact:
 - Alyssa Mucken, 503-986-0911.
 - The Water Resources Department maintains a drought website for sharing information on current drought conditions, emergency permitting tools, and water conservation fact sheets. These fact sheets contain tips for saving water inside the home, outside the home, and tips for agricultural operations, and municipal water systems.

- The Department's drought website also has resources for rural well owners, including a handbook developed in partnership with the Oregon Health Authority. Hardcopies of this handbook have been distributed to all field offices.

Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

Provide water conservation information to private building owner(s) if building is leased to your agency.

Encourage owner to take steps to reduce water use

Other: *Potential Challenges/Concerns:*

- The North Mall Office Building, which houses the Oregon Water Resources Department, Oregon Parks and Recreation Department, and Oregon Housing and Community Services, was certified as an LEED-Gold Building by the U.S. Green Building Council in 2005. The building was the first pilot project to promote sustainability in internal state government operations. The building hosts a number of water and energy efficiency features. For example, drought-tolerant grasses surround the building windows and stormwater planters have been installed to capture and treat rainwater. The building has been systematically designed to reduce the need for air conditioning as well.

State Agency Water Conservation and Efficiency Plan

Agency, Board or Commission Name: [Oregon Watershed Enhancement Board](#)

Point of Contact: *Liz Redon*

Phone Number: *503-986-0028*

E-mail Address: *liz.redon@oweb.state.or.us*

Check All that Apply

- Agency leases facilities from a private building owner – Complete Section A
- Agency leases state facilities – Complete first three boxes in Section A
- Agency owns facilities and/or lands – Complete Sections A and B
- Board or Commission – Complete first three boxes in Section A

Purpose:

Governor Kate Brown signed [Executive Order 15-09](#) in July 2015. The Executive Order calls for agencies to reduce non-essential water use by 15 percent or more at state-owned buildings, and to work with private building owners who lease facilities to state agencies to reduce non-essential water use. It also calls for all state agencies to implement water conservation messaging. This Water Conservation and Efficiency Plan is submitted to comply with the directive.

Please review *EO 15-09 Guidance Document #1* before completing.

Section A: To Be Completed By All Agencies, Boards and Commissions

1. Water Conservation Messaging

- Explain how you will encourage voluntary actions to conserve water: *OWEB provides grants to help Oregonians take care of local streams, rivers, wetlands and natural areas. By collaborating with community members and landowners across the state, OWEB's grants support voluntary efforts that result in: (1) Projects that restore and protect clean water and healthy habitat for native fish, wildlife and people; (2) A statewide network of watershed councils, soil and water conservation districts, and other local groups that develop and implement restoration projects; (3) Citizen awareness of watershed issues and participation in voluntary restoration and protection actions; (4) Strong and lasting partnerships to address complex natural resource issues; and (5) Jobs and the purchase of goods and services in local communities. This granting approach builds resilient watersheds that are better equipped for the effects of climate change and limited water availability. OWEB rents offices in Salem and five field offices from other state agencies; staff will work with those agencies as appropriate to implement water conservation strategies identified in their Water Conservation and Efficiency Plans.*

Examples include:

- Signs in facilities to encourage state employees to reduce their non-essential water use (Note: WRD and DAS will provide outreach materials at a later date).

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Explain how your agency will convey water conservation messages to the public, and if you need assistance with outreach materials. Include the name of your agency's outreach contact: *OWEB can make water conservation information available to local partner organizations for them to distribute conservation messaging to their communities. OWEB's contact is Eric Hartstein, and OWEB would need assistance with outreach materials.*

Examples include:

- Posting water conservation information on your website. (Note: WRD and DAS will provide template outreach materials at a later date.)

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Report to Oregon Water Resources Department annually on progress and barriers in implementing Executive Order 15-09.

REQUIRED OF ALL AGENCIES, BOARDS AND COMMISSIONS.

- Develop a protocol for staff to easily report leaks, inefficiencies and other wasteful water use practices

- Provide water conservation information to private building owner if building is leased to your agency

- Encourage owner to take steps to reduce water use

- Other: *OWEB is the state agency responsible for implementing the watershed improvement side of Ballot Measure 76. Measure 76 amended Article XV of the Oregon Constitution, dedicating lottery funds for the public purpose of financing restoration and protection of native fish and wildlife, watersheds and water quality in Oregon, specifically: (1) Protect and improve water quality in Oregon's river, lakes, and streams by restoring natural watershed functions or stream flows; (2) Secure long-term protection for lands and waters that provide significant habitats for native fish and wildlife; (3) Restore and maintain habitats needed to sustain healthy and resilient populations of native fish and wildlife; (4) Maintain the diversity of Oregon's plants, animals and ecosystems; (5) Involve people in voluntary actions to protect, restore and maintain the ecological health of Oregon's lands and waters; and (6) Remedy the conditions that limit the health of fish and wildlife, habitats and watershed functions in greatest need of conservation.*

Return to Lorri Cooper (lorri.l.cooper@state.or.us) at OWRD by 10/1/15

- **Potential Challenges/Concerns:** *OWEB's mission and associated agency goals, policies and programs are designed to guide granting processes that deliver funds for local organizations to help protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies. While it is challenging to persuade individuals to adopt water conservation measures, OWEB's grant programs provide incentive for voluntary action.*
- **Expected Results of Implementation:** *See current water conservation results described below. Expected results from projects funded by OWEB depend on grant proposals submitted by applicants.*
- **Actions Already Implemented in 2015:** *Identify actions and, if possible, include an estimate of the amount of water saved as a result: In the past two biennia, OWEB has funded restoration and acquisition projects that are related to irrigation efficiency. In order to obtain a list of these projects, OWEB's grant management system was queried for "pipe", "piping" and "sprinkler" projects awarded between July 1, 2011 and June 30, 2015. The results were reviewed, and projects with an obvious focus on habitat (e.g., riparian projects with a pipe component to an off-channel water source) were removed. Of the remaining projects, an additional query was conducted on the project summaries for those that contained "cfs". This allowed for an analysis of the estimated cfs that was stated as conserved in the project summary, as well as the cfs now protected by statute. The results are summarized as follows: (1) Number of Projects – 132; (2) Number of Projects w/Protected CFS – 8; (3) CFS Conserved in Project Summary – 18.95; (4) CFS Protected by Statute – 12.95; (5) Cost of Projects w/Protected CFS - \$3,275,189; and (6) Total OWEB Funding for Piping - \$9,296,628*