



SUMMARY OF CURRENT AND PLANNED ACTIONS

August 2015

INTRODUCTION:

By Executive Order 2015-03 issued May 8, 2015, Governor Brian Sandoval established the Nevada Drought Forum (Forum) to assess the drought in Nevada, identify best conservation practices and policy needs, and to make recommendations regarding next steps. The Forum is intended to facilitate a local dialogue among interested stakeholders, and to help identify best practices for drought policy, preparedness and management.

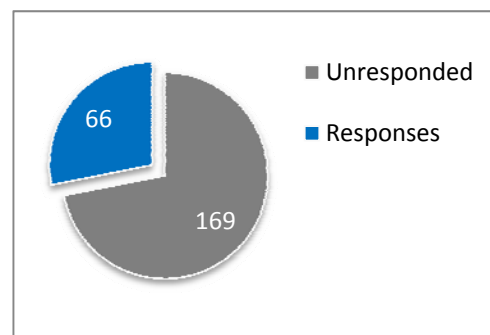
Participation on the Drought Forum includes the following representatives:

- Director of the Nevada Department of Conservation and Natural Resources
- Director of the Nevada Department of Agriculture
- The State Engineer of the Nevada Division of Water Resources
- The Chief of the Nevada Division of Emergency Management
- The Nevada State Climatologist
- The Dean of the University of Nevada Cooperative Extension
- A representative of the Desert Research Institute
- A representative of the Southern Nevada Water Authority
- Other members deemed necessary by invitation of the Governor

Among other things, the Forum is responsible to prepare a *Summary of Current and Planned Actions* based on information from local, state and federal entities. In May 2015, the Forum issued a questionnaire requesting information from these stakeholders. Respondents were asked to provide information on: water supply sources (groundwater, surface water, other); area of service (size, number of customers served, location); drought impacts on operations, resource availability and/or planning activities; actions taken, underway or planned; and, topics/issues for possible future discussion by the Forum. The following is a summary of respondent information. Individual responses by agency are provided in their entirety on the Forum website.

QUESTIONNAIRE OVERVIEW

The questionnaire was issued to more than 235 municipal agencies, state agencies, federal government agencies and other water users throughout the state. Of those, approximately 28 percent or 66 entities responded. While state agencies with responsibilities associated with drought and drought conditions were required to respond, other entities were requested to voluntarily submit information.



While some respondents offered a detailed listing of current and planned actions, others referred to having a water conservation plan, with no specific conservation/drought response measures identified. Likewise, several questionnaires were returned without information on drought impacts or expected impacts to available water supplies. Due to limitations on the type and consistency of information received, this *Summary of Current and Planned Actions* is unlikely to capture the entirety of drought impacts throughout the state of Nevada, nor fully depict water management and conservation efforts being taken by responding agencies.

The following summary is based solely on information provided by respondents and is sorted by agency type (Municipal Agencies, Other Water Purveyors, State Agencies, and Federal Agencies). Informational responses under “Action Taken or Underway” and “Action Planned” were extracted and grouped into like activities by agency type to better compare efforts within each category. A brief description of the type of activities being taken as described by respondents is also included under each major heading (below).

Action Taken or Underway is represented in the tables below by the letter “C” and *Action Planned* is represented by the letter “P.”

MUNICIPAL AGENCIES

Fourteen Municipal water agencies responded to the information request. These include Carson City Public Works, City of Elko, City of Ely, Douglas County, Eureka County, Incline Village General Improvement District (GID), Kingston Town Water Utility, Lyon County Water Utilities Department, Pershing County Water Conservation District, Southern Nevada Water Authority, Stagecoach GID, Topaz Ranch Estates GID, Truckee Meadows Water Authority, and Virgin Valley Water District.

Water Supply Sources:

Eight agencies are served by groundwater, two are served by surface water and four are served by a combination of groundwater and surface water.

Drought Response Summary - Municipal

Agency Name	Education/Outreach	Landscape Codes	Irrigation Audits	Water Budgets	Watering Restrictions	Waste Investigation	Leak Repair / Detection	Metered Use/Rates	Incentives/Rebates	Industry Partnerships	Facility Modifications	New Supply Acquisition	Other
Carson City Public Works					C	C					C		C
City of Elko					C	C/P							
City of Ely					C								
Douglas County	C												C/P
Eureka County	C				C/P		C	C	C				
Incline Village GID	C	C	C				C	C					
Kingston Town Water Utility	C						C	C					
Lyon County Utilities Department	C				C								
Pershing County Water Conservation Dist.													
Southern Nevada Water Authority	C	C		C	C	C	C	C	C	C	C/P	C/P	C/P
Stagecoach GID	C					C	C	C					
Topaz Ranch Estates GID					C								
Truckee Meadows Water Authority	C	P	C		C	C	C	C		C	P	C	C
Virgin Valley Water District								C					

Drought Impacts:

Reported impacts range in nature from no impact to significant impact. Several respondents noted higher customer water use due to drought conditions, as well as lowering ground and/or surface water levels. For some, lowering water levels do not have an immediate impact, but have the potential for impact if conditions persist.

Other respondents indicated that lowering water levels have had significant impacts on water supply availability, facilities and operations. Additionally, one respondent reported significant financial impacts related to drought conditions.

Current and Planned Conservation/Drought Response Actions:

Water Conservation Plan:

Six respondents indicated that they have a water conservation plan and/or a drought/emergency plan in place. In some instances, plans are tied to surface or groundwater levels; response actions are implemented if/when water levels decline.

Education/Outreach:

Eight respondents indicated implementation of community/customer outreach and/or formal education programs to promote conservation and drought awareness. Specific activities by agency range significantly across the category to include one or more of the following: direct print (for example, bill inserts, monthly newsletters and advertisements), web/social media outreach, radio/television media, billboards, workshops, table/event participation, homeowners association (HOA) outreach, government agency engagement, restaurant/business engagement, residential workshops/classes, industry workshops/certifications, tours, lectures and conferences, and forms of youth engagement (for example, youth advisory committees and direct outreach with local schools).

Landscape Codes:

Two respondents indicated implementation of development codes that limit water waste (runoff) and restrict the amount of ornamental turf grass in residential and/or commercial properties. One respondent indicated landscape restrictions would be considered if future conditions warrant.

Irrigation Audits:

Two respondents indicated they are offering water/irrigation audits to customers to increase water use efficiency.

Water Budgets:

One respondent indicated implementation of golf course water budgets. These budgets are based on irrigated acreage and include surcharges for overuse.

Watering Restrictions:

Eight respondents indicated some form of watering restriction is in effect. These include one or more of the following: time-of-day restrictions and/or assigned day-of-week restrictions. Some agency restrictions are enforced with warnings for violation and/or penalties, while others are based on voluntary compliance.

One respondent indicated that future actions may include implementation of more aggressive watering restrictions if future conditions warrant.

Water Waste:

Five respondents indicated that water waste prohibitions are in effect. Enforcement measures vary from voluntary compliance/customer education to termination of service. Definitions of water waste also vary, but generally include watering outside an assigned day; watering outside prescribed watering hours; allowing water to run off property; and/or using water for building, vehicle or equipment washing when prohibited.

One respondent indicated implementation of water waste enforcement (citations/termination of service) would be considered if future conditions warrant.

Leak Detection/Repair:

Six respondents indicated active leak detection/repair programs. In some instances, this includes proactive leak surveys. Two respondents also reported that they are alerting customers via bill inserts/email of potential leaks when continuous water use is observed (based on meter readings).

Metered Use/Rates:

Seven respondents indicated use of water meters/metered rates within their service areas. Rate structures vary from single-tiered rates to multi-tiered rates that have increasing fees with higher use.

Incentive/Rebate Programs:

One respondent reported implementation of a water efficient landscapes program that offers financial incentives for customers who remove and replace turf with water efficient plants and trees. The same respondent is also offering rebates for the purchase of water smart irrigation controllers (including rain sensors), pool covers and water efficient technologies, as well as coupons for use at water efficient car washes.

A second respondent referred to implementation of a water efficiency rebate program.

Industry Partnerships:

One respondent indicated partnerships with various industry/businesses groups (development community, landscape community, restaurant industry, school district). The respondent also developed an annual conference to focus on conservation innovations/urban water efficiency, drawing industry professionals.

Another respondent reported partnerships with Nevada Landscape Association and University of Nevada Cooperative Extension to provide information on how residents and businesses can use less water than usual and still preserve their landscaping.

Facility Modifications/New Facilities:

Two respondents indicated facility modifications have been conducted, are planned and/or are underway. One respondent reported completing significant modifications to water intake and pumping facilities to provide access to better water quality and to lower treatment costs. Other major efforts include modifications to pumping stations and intakes, and construction of a new major intake and pumping facilities to preserve water supply access should water levels continue to decline.

Another respondent reported planned development of aquifer storage and recovery wells to allow for recharge of treated surface water into the groundwater aquifer. Other major projects include development of distribution pipeline and booster pump stations, groundwater production wells, water treatment facilities and improvements to enhance storage capabilities.

New Supply Acquisition/Development:

Two respondents indicated that new supply acquisition and/or development of permitted rights is underway to respond to drought conditions and augment existing supplies. Efforts include acquiring new supplies and/or banking water for future use.

Other Actions:

One respondent described interstate and international efforts that have been completed, are underway or are planned to secure additional water supplies, as well as participation in efforts to help stabilize/delay shortage declarations for their primary water supply source. Efforts include development of facilities to capture lost water within the lower Colorado River system, financial participation in demonstration projects in exchange for water resources, coordination with Colorado River states to implement shortage guidelines, participation in water supply and demand studies to better understand future supply imbalances, participation in bi-national processes to manage shared water supplies, and participation in pilot conservation programs designed to help reduce the impact and magnitude of Lake Mead water level declines.

Three respondents are implementing a voluntary 10 percent water use reduction.

OTHER WATER PURVEYORS

A total of 32 Other Water Purveyors provided response as part of the information request. These include: Apex Generating Station, Apex Landfill – Republic Services, Big 5 Mobile Home Park, Blue Diamond, Bonnie Springs – Old Nevada, Camp Lady of the Snows, Cold Creek Homeowners Association C/O Camco, Desert Mirage Homeowners Association, Eastland Heights Water Association, Equestrian Estates Co-Op Water Association, Gaye Haven Intermediate Care Facility, Georgia Pacific Gypsum, Gerlach GID, Harris Springs Ranch, Hillcrest Manor Water Users Association, Laker Plaza, McGill Ruth Consolidated Sewer and Water GID, Rainbow Gardens Water Users, Rancho Co-Op Water Company, Rancho Vista 4, Roark Estates Water Association, Sky Ranch Water Service, Spirit Mountain Utility, Spring Creek Utilities Co., Spring Mountain Motor Sports Ranch, Sunrise Mountain Trailer Park, Torrey Pines/Tina Lane Water Association, Tropicana Resort and Casino, Trout Canyon Land and Water Users Association, Utilities Inc. of Nevada, Utilities Inc. of Central Nevada, and Van’s Trailer Oasis.

Water Supply Sources:

Thirty respondents are served by groundwater and two are served by surface water.

Drought Response Summary (Other Water Purveyors)

Agency Name	Marketing/Outreach	Landscape Codes	Watering Restrictions	Waste Investigation	Cooling Restrictions	Washing Restrictions	Leak Detection/repair	Incentives/Rebates	Facility Modifications	Other
Apex Generating Station	C						C			
Apex Landfill - Republic Services	C						C			
Big 5 Mobile Home Park	C						C			
Blue Diamond	C						C			
Bonnie Springs, Old Nevada							C			
Camp Lady of the Snows	C						C			
Cold Creek Homeowners Association C/O Camco	C						C			
Desert Mirage Homeowners Association	C						C			
Eastland Heights Water Association	C						C			
Equestrian Estates Co-Op Water Association	C						C			
Gaye Haven Intermediate Care Facility	C						C			
Georgia Pacific Gypsum	C						C			
Gerlach General Improvement District	C									
Harris Springs Ranch	C						C			
Hillcrest Manor Water Users Association	C						C			
Laker Plaza	C						C			
McGill Ruth Consolidated Sewer & Water GID			C							
Rainbow Gardens Water Users	C						C			
Rancho Co-Op Water Company	C						C			
Rancho Vista 4	C						C			
Roark Estates Water Association	C						C			
Sky Ranch Water Service		P	P	P	P	P				
Spirit Mountain Utility	C						C			
Spring Creek Utilities Co.		P	P	C/P	P	P		C	P	
Spring Mountain Motor Sports Ranch							C			
Sunrise Mountain Trailer Park	C						C			
Torrey Pines/Tina Lane Water Association	C						C			
Tropicana Resort and Casino							C			
Trout Canyon Land & Water Users Association	C						C			
Utilities Inc. of Nevada		P	P	P	P	P		C		
Utilities, Inc. of Central Nevada		P	P	P	P	P		C		C
Van's Trailer Oasis	C						C			

Drought Impacts:

One respondent reported supply/facility impacts to a groundwater well that has significantly reduced capacity due to groundwater level declines. Another respondent indicated financial impacts due to decreased water use. There were no other reported impacts from respondents.

Current and Planned Conservation/Drought Response Actions:

Water Conservation Plan:

Thirty-one respondents indicated they have a water conservation plan or drought plan in place.

Outreach:

Twenty-three respondents indicated implementation of outreach to make homeowners/customers aware of conservation options and/or to promote drought awareness. In most instances, efforts included posting fliers in the community and/or direct outreach via email.

Landscape Codes:

Five respondents indicated possible future implementation of development codes, including restrictions that limit the amount of ornamental turf grass in residential and/or commercial properties, as well as restrictions on the planting of cool season grasses. These actions would be considered for implementation if future water supply conditions warrant.

Watering Restrictions:

Five respondents indicated possible future implementation of watering restrictions, including time-of-day and assigned day-of-week restrictions. These actions would be considered for implementation if future water supply conditions warrant. One respondent reported current curtailment efforts in part of their service area that is being implemented through “off-day watering;” another respondent indicated that time-of-day restrictions are currently in effect for summer months.

Water Waste Restrictions:

Five respondents indicated possible future implementation of water waste investigations/notifications. These actions would be considered for implementation if future water supply conditions warrant.

Washing Restrictions:

Five respondents indicated possible future implementation of restrictions for the washing of paved surfaces, buildings and equipment. These uses would be prohibited unless water is discharged to a sanitary sewer or is contained on site. The same respondents also indicated possible future implementation of vehicle washing restrictions, including frequency of washing and requirements for use of a positive shut-off nozzle. These actions would be considered for implementation if future water supply conditions warrant.

Cooling System Restrictions:

Five respondents indicated possible future implementation of restrictions for the use of cooling systems for human comfort, including seasonal use limitations and restricted hours of operation. These actions would be considered for implementation if future water supply conditions warrant.

Leak Detection/Repair:

Twenty-six respondents indicated heightened awareness of possible leaks and processes to address leaks and other system issues.

Rebate Programs:

Three respondents reported current implementation of rebate programs for the installation of high-efficiency toilets and washers.

Facility Modifications:

One respondent reported future plans to re-drill a well that has experienced significantly capacity reductions due to water level declines.

Other:

One respondent reported vegetative management efforts, including the removal of salt cedar trees.

STATE AGENCIES

A total of 12 State Agencies with responsibilities associated with drought and drought conditions provided information in accordance with the Executive Order. These include the Colorado River Commission of Nevada, Nevada Department of Agriculture, Public Works – Building and Grounds Section, Nevada Department of Wildlife, Nevada State Parks, Nevada Division of Environmental Protection, Nevada Division of Emergency Management, Nevada Division of Forestry, Nevada Division of State Lands, Nevada Division of Water Resources, Nevada Division of Minerals and the Public Utilities Commission of Nevada.

Drought Response Summary (State Agencies)

Agency Name	New/Improved Storage	Stabilize Water Levels	Secure Resources/Facilities	Outreach	Reduced Irrigation/Restrictions	Plumbing/Infrastructure Improvement	Monitoring/Mitigation	Assistance
The Colorado River Commission of Nevada	C	C	C	C			C	
Nevada Department of Agriculture				C/P				
Public Works - Building & Grounds Section	C/P				C/P	C	C	
Nevada Department of Wildlife		C/P		C/P			C	C
Nevada State Parks			C		C/P	C	C	
Nevada Department of Environmental Protection			P	C			C	C/P
Nevada Division of Emergency Management				C			C	C/P
Nevada Division of Forestry				C	C	P	C	
Nevada Division of State Lands							C	C
Nevada Division of Water Resources		C		C/P	C	C/P	C	C
Nevada Division of Minerals					P	P		
Public Utilities Commission of Nevada					C			

Drought Impacts:

Impacts of drought varied significantly by agency from no impact to significant impact. The types of impacts reported included by agency include one or more of the following: water supply disruptions and facility failures due to reduced precipitation and/or inflow to surface and groundwater systems and/or impacts/potential future impacts on wildlife and environmental resources, recreation (boating), game (hunting and fishing) and park visitation.

Increased potential for wildfire as well as drought-related impacts to finances/operations was also noted.

Current and Planned Conservation/Drought Response Actions:

New/Improved Storage:

Two respondents indicated that storage projects have been implemented or are underway. One respondent noted the implementation of interstate/international water banking efforts (off-stream storage and Intentionally Created Surplus). Another respondent reported improvements to catchment facilities to improve the diversion of flows/runoff.

Stabilize Water Levels:

Three respondents described efforts to stabilize water levels for groundwater and/or surface water resources. Efforts were implemented to prolong shortage declarations of Colorado River resources; maintain minimum pool agreements and minimize drought impacts to reservoir fisheries/water supplies; and, respond to groundwater level declines in basins significantly impacted by current drought conditions.

Secure New Resources/Facilities:

One agency reported efforts to secure new resources, including the implementation of off-stream storage/water banking agreements (also noted above) as well as the implementation of Intentionally Created Surplus as allowed under the 2007 Interim Guidelines. Other respondents indicated efforts were underway to develop storage/catchment facilities (also noted above) and prepare for replacement groundwater wells that had failed due to drought conditions. A statewide working group to discuss ways to increase reuse of treated wastewater was also noted.

Outreach:

Seven respondents indicated some level of current and/or planned outreach to promote conservation, drought awareness, and/or to help share information about drought-related impacts (for example, increased fire risk, groundwater level declines, boater safety, urban wildlife issues, etc.). Outreach activities by agency range in nature and include one or more of the following: public workshops, social media outreach, special briefings, special event attendance, radio/television media and direct customer outreach.

One respondent also noted participation in development of the State Drought Response Plan, the Drought Emergency Incident Action Plan and the State Drought Strategic Plan, as well as activation of the State's Emergency Operations Center.

Reduced Irrigation/Watering Restrictions:

Six respondents indicated the implementation or planned implementation of water reductions associated with landscape management practices. Efforts by agency vary and include one or more of the following: limiting the number of days/week that landscapes are irrigated, reducing total duration of landscape irrigation, and/or limiting the development of new landscaped areas.

One respondent reported issuing curtailment orders in two groundwater basins, limiting the amount of groundwater that can be pumped using supplemental groundwater rights for irrigation by 50 percent. Orders were also issued to shut down new appropriations of groundwater (excluding domestic wells) in basins that are fully appropriated and experiencing steep water level declines.

Plumbing/Infrastructure Improvements:

A number of respondents indicated efforts and/or plans to retrofit facilities with water efficient plumbing fixtures, including water closets, urinals, showers, toilets and/or faucets. Other efforts include actions/plans to replace open ditch irrigation facilities with PVC piping, update irrigation facilities to drip emitters, and investigate the implementation of water reuse.

Monitoring and Mitigation:

Nine respondents indicated monitoring and mitigation efforts are underway in response to drought conditions. Specific activities vary by entity, but generally include monitoring one or more of the following: surface and groundwater levels, wildlife water developments, water usage/pumping, fire risks, natural resources populations (plants and animals), fish and game populations and urban wildlife issues (encroachment of wildlife on urban areas).

A significant number of mitigation efforts were reported and are described in detail by agency response in the Appendix. In summary, efforts include one or more of the following: requirements for use of totalizing meters on some wells to help monitor usage in the Humboldt River drainage areas; curtailment orders for groundwater pumping; new designations in various groundwater basins; emergency water hauls for wildlife; prioritization of new wildlife water development; removal of non-native/invasive plants/animals; new/revised boater safety patrols; development of new infrastructure; changes to fish hatchery operations; project holds for new development (Landscape Master Plan for Stewart Complex); fire safety preparations; and, changes to recreational schedules and/or sport fishing operations.

Assistance:

Five respondents indicated work efforts to provide drought-related assistance. In summary, these include one or more of the following: expedited reviews of applications for relocation of buoys, swim floats and swim lines; assistance to remove water thirsty trees, remove debris, and improve irrigation efficiency; and expedited process for temporary applications for transfer of water and requests by drillers to deepen or re-drill wells that have dried up.

Additionally, one respondent is providing support to water purveyors to help update facilities under the Nevada Department of Environmental Protection's Drinking Water State Revolving Fund program. Another is working with the United States Department of Agriculture to provide information on federal drought recovery loans.

FEDERAL AGENCIES

A total six (6) federal agencies provided response as part of the information request. These include the Bureau of Land Management, USDA Nevada Farm Service Agency, Fallon Naval Air Station, U.S. Air Force (Nellis), USDA Forest Service – Humbolt-Toiyabe National Forest and USDA Natural Resources Conservation Service.

Drought Response Summary (Federal Agencies)

Agency Name	Education/Outreach	Monitoring/Mitigation	Financial Assistance	Conservation Compliance	Other
Bureau of Land Management	C	C			C
USDA NV Farm Service Agency	C		C/P		
Fallon Naval Air Station	C			C	
U.S. Air Force				C	
USDA Forest Service, Humboldt-Toiyabe National Forest		C		C	C
USDA Natural Resources Conservation Service	C		C/P		

Drought Impacts:

Drought effects varied by agency and include impacts to one or more of the following: range, wildlife, recreation, cultural resources, success and magnitude of restoration efforts, minerals, reduced livestock forage (including impacts to grazing allotments and Animal Unit Months/AUMs), loss of agricultural production, livestock herd reductions, and tree health. Several respondents also noted increased interest/participation in financial assistance programs offered to mitigate drought impacts.

Potential effects reported include health and resiliency of timber stands due to insect/disease, as well as increased fire hazards. One agency noted that the latter could result in more frequent/larger wildfires with fewer water sources available for fire suppression. Other potential effects include impacts to recreation (fishing, boating, camping and campground day use).

Current and Planned Conservation/Drought Response Actions:

Education/Outreach:

Four respondents indicated participation in or implementation of outreach efforts to provide information/updates and share information on drought assistance programs. Actions varied by agency and include one or more of the following: participation in stakeholder meetings, drought forums, workshops and other similar forums. Other outreach efforts include newsletters, press releases, and water use information sharing.

Monitoring and Mitigation

Two respondents reported monitoring and mitigation efforts. Agency efforts vary and include one or more of the following: development/implementation of environmental assessment tools (including triggers for response actions), changes to grazing permit terms (quantity of livestock, timing and duration of use), water hauling, bans on prescribed burns, potential restrictions on fires on public lands (for example, campfires), increased wildfire preparedness, and monitoring and management of forest health (tree removal, thinning, etc.).

Financial Assistance:

Two respondents reported implementation of financial assistance programs that provide funding for one or more of the following: livestock water transport, stream restoration, well deepening, grazing losses and soil erosion. Specific assistance programs cited in agency responses include: Livestock Forage Program; Emergency Conservation Program; Emergency Livestock Assistance Program; and, Emergency Loan process. Respondents have requested additional funding to provide assistance to agricultural producers.

Conservation Compliance:

Three respondents reported conservation compliance efforts in accordance with the President's Executive order 13693 issued March 2015.¹ Specific measures being implemented by agency include one or more of the following: landscape conversions, reduced landscape irrigation, installation of low-flow fixtures (current and planned), vehicle washing restrictions, and plans to implement reuse. Planned efforts also include increased water metering and development of projects that reduce the irrigation demands.

Other:

One respondent reported the development of resources tools (memos, handbook, etc.) to help ensure consistency within the agency in regards to development/implementation of management actions, as well as drought training and tours for agency representatives. A review of drought policies and implementation strategies across the state was also conducted. Another respondent reported foregoing permitted water rights due to access issues. The water rights were allowed to be utilized by other users.

Summary of Topics and Issues for Possible Future Discussion

The survey included an open ended question asking respondents what types of topics/issues they would like the Nevada Drought Forum to address. The following topics/issues were identified as areas of interest for possible future discussion.

Conservation:

- Tiered rate issues.
- Enforcement of water conservation plan violations, when implemented.
- Regional differences in water supply sources and use patterns, and current conservation practices.
- Conservation methods for water being used or tested in Nevada by beneficial use.
- Incentives to reduce water use and waste.

¹ As part of Executive Order 13693 issued March 2015, federal agencies are required to improve water use efficiency and management. This includes: (i) reducing agency potable water consumption intensity measured in gallons per gross square foot by 36 percent by fiscal year 2025 through reductions of 2 percent annually through fiscal year 2025 relative to a baseline of the agency's water consumption in fiscal year 2007; (ii) installing water meters and collecting and utilizing building and facility water balance data to improve water conservation and management; (iii) reducing agency industrial, landscaping, and agricultural (ILA) water consumption measured in gallons by 2 percent annually through fiscal year 2025 relative to a baseline of the agency's ILA water consumption in fiscal year 2010; and (iv) installing appropriate green infrastructure features on federally owned property to help with storm water and wastewater management.

Development:

- Vegetation planted on streets, medians and highways regardless of drought concerns (Reno and Carson City).
- How is the State going to plan for water availability for future growth, particularly in areas that are already at capacity and reductions in water use is needed, or where BLM has identified potential future land disposals/sales?

Agriculture:

- Examples of successes and failures related to agricultural water uses during drought (changes in irrigation practices, water saving silica chips, other soil additives, watering at night, use of lysimeters).
- How can the Drought Forum help grazing permittees with displacement of livestock?

Facilities:

- Consideration to expanding existing or establishing additional new water storage facilities to help offset the effects of drought conditions while providing additional storage for flood control.

Communication / Coordination:

- Coordination and communication to ensure we all work together constructively and efficiency.
- Information sharing amongst Nevada agencies on successes, threats, issues and lessons learned in drought planning
- Increased coordination on drought planning between northern and southern Nevada.
- Include a plan for state agencies, water providers and communities to work together to educate all Nevadans that the wise use of water begins in each home and business.
- Education is critical to get communities to work together towards water conservation particularly during periods of drought. Water conservation needs to be a part of community culture and pride in the driest state in the nation. Joint education is a must.

Data/Technology:

- Discussion of new innovative technologies, science and other developments to aid Nevada in drought management.
- Need for well monitoring. The data from well monitoring is necessary to understand consumption and protect the groundwater supply. Every point of consumption should be metered, whether domestic well or central water service. Everyone should be aware of the consumption they use.
- The data from all wells is needed to have an effective Groundwater Management Plan. Particularly, understanding actual domestic well use is critical as there is no existing data.

Environment, Wildlife and Recreation:

- How will the State manage game species that rely on guzzlers?
- How will the State manage water resources to reduce impacts to listed species, particularly water-dependent species?
- How will the State continue to manage high revenue producing activities such as tourism, mining and hunting?

- How can the Drought Forum help the BLM with displacement of recreationists?
- How can the Drought Forum help the BLM improve restoration efforts during drought conditions?
- How can the Drought Forum help with the management of sage grouse and associated habitats throughout the State?

Other:

- Potential law or policy changes that promote best management practices in protecting our water resources.
- A revolving fund water resource development loan program funded by the state, for ditch companies, canal companies and other groups to find loan funding to complete works of improvement such as line or pipe canals, automation, improve water storage and monitoring of infrastructure.
- Utilities who charge for water are not always the voice which is the most heeded; in some areas residents are cognizant that decreased consumption can mean increased rates for the utility to meet their revenue requirements.
- I would like to see some Federal Agencies listed on the Nevada Drought Forum. This is not to over shadow any efforts by the State of Nevada simply because of federal financial resources available to help with drought disaster assistance. Rather this is to form a stronger relationship of partners assembled by the Governor's Office to better distribute assistance to all Nevada farmers, ranchers, and rural communities in times of drought crises.
- Groundwater over appropriation is a critical concern, especially for smaller farmers. Groundwater management districts may provide a valuable forum for conservation and innovation.
- Mine dewatering.
- The effects of diminishing water table.
- Public impacts to waterway navigation and public safety.
- Long-term reliability and sustainability of southern Nevada's water resources.
- How will we determine when the drought is over and recovery has begun? As an agency, BLM has been discussing hydrologic vs vegetative drought and when management activities can return to pre-drought conditions without impacting land health and vegetation conditions.
- Basin overappropriation of groundwater.