

Questions about the Form chunt@gov.nv.gov 1-775-684-5670

Under the <u>Governor's Executive Order 2015-03</u>, issued April 8, 2015, state agencies, municipal water providers and federal agencies are requested to provide a summary of current and planned actions related to drought. This information must be provided to the Nevada Drought Forum by no later than **May 15, 2015.** Please use the following form to submit your agency's information.

#### **CONTACT INFORMATION**

AGENCY NAME			
The Colorado River Commission of Nevada (CRC)			
STREET ADDRESS		CITY, STATE ZIP	
555 E. Washington Avenue, Suite 3100		Las Vegas, NV 89101	
CONTACT NAME	TITLE		
Jayne Harkins	Executive Director		
CONTACT PHONE	EMAIL		
702-486-2670	jharkins@crc.nv.gov		

# **ABOUT THE AGENCY**

AGE	NCY TYPE (Check O	ne)			
	<b>Nunicipality</b>		Tribe	Federal	Other
WAT	ER SUPPLY SOURC	ES (Check all that apply)			
	Groundwater	$\boxtimes$	Surface Water (De	scribe sources)	□n/a
	Groundwater	Co	lorado River		⊔N/A
SER\	ICE AREA DESCRIP	TION (Size, number of c	ustomers served, loc	cation)	
The	CRC is directed b	y Nevada Revised St	atutes (NRS) Chap	ter 538 to receive, protec	ct, safeguard, and hold in
trust	trust for the State of Nevada all rights to waters of the Colorado River and power generated thereon. Nevada's				
Colo	Colorado River allocation provides 90% of southern Nevada's water supply. The CRC is responsible for				
deli	delivering hydroelectric power generated and marketed by the federal government to industrial and wholesale				
cust	customers in southern Nevada. CRC's hydropower customers include American Pacific Corporation, Basic Water				
Con	Company, Lhoist North America, the City of Boulder City, Lincoln County Power District No. 1, NV Energy,				
Ove	Overton Power District No. 5, Valley Electric Association, the Southern Nevada Water Authority, Titanium Metals				
Cor	poration and Tron	ox, LLC.			

#### **DROUGHT IN NEVADA**

Briefly summarize how drought has impacted operations, resource availability and/or planning activities (500 words)

Fifteen years of drought and lowest ever Lake Mead elevations may force the Secretary of the Interior to declare a shortage condition in the lower basin in the near future. Under a shortage condition, Nevada's annual apportionment of 300,000af is reduced as follows: Tier 1: at or below 1075' to 1050'- 287,000af; Tier 2: below 1050' to at or above 1025'- 283,000af; Tier 3: below 1025'- 280,000af. While this does not impose an immediate threat to southern Nevada, since currently, southern Nevada consumptively uses less than even these shortage amounts (224,622af consumptively used in 2014), on going, persistent drought may present long-term threats.

Further decline in lake levels will negatively impact the CRC's ability to deliver its full hydroelectric power allocation. All turbine units will have decreased power capability and efficiency below Mead elevation of 1050ft. Plant capacity will decrease from its current amount of 1573 MW (based on a 1080' elevation) to 1371 MW at 1050ft. Below 1000ft, plant capacity will decline to 1046 MW; and below 950ft to 696 MW. Hydroelectric power currently is a reliable, clean and inexpensive energy source, costing up to 50% less than energy purchased on the open market. The Southern Nevada Water Authority (SNWA) is a CRC customer and uses this hydroelectric power to run the Southern Nevada Water System, the primary conveyance for delivering water to the citizens of southern Nevada. With less hydroelectric power production available, energy costs for CRC customers will significantly increase.

As early as 2002, the CRC has worked with SNWA to plan against future shortage risks by shoring up southern Nevada's resources. First such efforts produced offstream storage of some of Nevada's unused apportionment in both Arizona (with the Arizona Water Bank Authority (AWBA)) and in California (with Metropolitan Water District of Southern California (MWD)), through Storage and Interstate Release Agreements executed in 2002 and 2004 respectively. Currently about 600,000af is stored with AWBA and 200,000af stored with MWD. During this same time, the CRC participated in the development of the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, which provided incentives to contract holders to create additional water resources (Intentionally Created Surplus (ICS)) for future use through investment projects, provided for the balancing of lake levels between Powell and Mead to protect against shortage levels, and specifically authorizes SNWA to use its Developed Shortage Supply under a shortage condition.

Currently, Nevada has over 500,000af of ICS. More recently, the CRC has been participating in basin states drought contingency planning under which the Bureau of Reclamation, the seven states and municipal water providers are seeking to develop voluntary mechanisms for adding water ("protection volumes") to Lake Mead. The parties agreed to a five-year goal to create between 1.5 and 3.0 million acre feet of new water added to Lake Mead by the end of 2019. The CRC, along with the other lower basin states, Reclamation, and municipal water agencies executed a Memorandum of Understanding in December 2014 to use their best efforts to achieve a portion of this volume by the end of 2017. At the binational level, the CRC is working with Reclamation and other stakeholders to develop drought contingency planning opportunities with Mexico.

#### **INSTRUCTIONS FOR FOLLOWING SECTION:**

Action Taken or Underway

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

If you are a state agency, please cite applicable authority for each action.

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Action rake	n of officerway
ACTION	Assigned watering days
SUMMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.

	or Underway Action Planned
ACTION	Off Stream Storage
SUMMARY	Executed Storage and Interstate Release Agreement (SIRA) with SNWA, Reclamation and Arizona Water Banking Authority (AWBA) December 18, 2002, under which AWBA agrees to store water in its ground water aquifer for the benefit of SNWA and through which the AWBA is storing over 600,000af for Nevada's future use.  Executed SIRA with SNWA, Reclamation and MWD October 27, 2004, under which MWD agrees to store water for the benefit of SNWA and through which MWD is storing over 200,000af for Nevada's future use. CRC authority pursuant to NRS 538, et. seq.

Action Taker	or Underway Action Planned
ACTION	2007 Interium Surplus Guidelines implementing agreements
SUMMARY	Executed implementing agreements to the Interium Guidelines, including delivery agreements, Forbearance Agreement and Exhibits, supporting SNWA's ability to create water available for storage in Lake Mead, through project investments and plan accordingly to ensure for Nevada a reliable, sustainable future water use from the Colorado River. CRC authority pursuant to NRS 538, et.seq.

Action Taken	or Underway Action Planned
ACTION	Colorado River Basin States Drought Response and Sustainability Plan
SUMMARY	CRC and other lower basin stakeholders and Reclamation developed a five-year goal to work together in the lower basin to take proactive and voluntary actions that would result in between 1.5 and 3.0 million acre-feet of new water added to Lake Mead by the end of 2019. CRC authority pursuant to NRS 538, et. seq.

Action Taken	or Underway Action Planned	
ACTION	Memorandum of Understanding for Pilot Drought Response Actions	
SUMMARY	Reclamation, municipal water agencies and CRC and other lower basin states agreed to use efforts to develop the first 740,000 acre feet of Protection Volume (CAP = 345kaf, MWD = kaf, SNWA = 45 kaf and Reclamation = 50 kaf). Additionally, the parties will continue to se new Protection Volume efforts and partnerships to store water in Lake Mead, implement voluntary demand reduction programs to leave water in the system for all users, develop implement programs to address the existing supply and demand imbalances, and address term sustainability, through providing flexibility to water users during low reservoir condit using alternate sources of water supply, and reducing system losses. The parties must corby 2016 to address long term sustainability and flexibility. They must also consult if Lake Nelevation should fall to 1,060' during the five year period, to make adjustments to the plan needed to further protect Lake Mead's elevation. CRC authority pursuant to NRS 538, etc.	and long- tions, nsult Mead's

	or Underway Action Planned
ACTION	Quarterly Periodic reports to the Governor on River hydrology
SUMMARY	The CRC provides monthly reporting to the Governor's office on the status of Colorado River hydrology and issues that have arisen or may arise concerning the risks of drought and management efforts underway or in development that will ensure the safety of Nevada citizens. CRC authority pursuant to NRS 538, et. seq.

Action Taken	or Underway Action Planned	
ACTION	N/A	
SUMMARY	N/A.	

# What types of topics/issues would you like the Nevada Drought Forum to address?

Long term reliability and sustainability of southern Nevada's water resources; information sharing amongst Nevada agencies on successess, threats, issues and lessons learned in drought planning; increased coordination on drought planning between northern and southern Nevada; discussion of new innovative technologies, science, and other developments to aid Nevada in drought management.



When complete, please return to:



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AGENCY NAME				
Nevada Department	of Agriculture			
STREET ADDRESS			CITY, STATE ZIP	
405 S. 21 <sup>st</sup> Street			Sparks	
CONTACT NAME		TITLE	1	
Jerri Conrad		Executive Assistant to the	e Director	
CONTACT PHONE		EMAIL		
775-353-3619		jwilliams-conrad@agri.nv	v.gov	
Groundwater	TION (Size, number o	Surface Water (Describe		⊠n/A
PROUGHT IN NEVAL	)A			
ROUGHT IN NEVAL		d operations, resource availa	bility and/or plannir	ng activities (500 words)

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

**Action Taken or Underway** 

Action Taken or Underway

**ACTION** 

**SUMMARY** 

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

☐ Action Planned

If you are a state agency, please cite applicable authority for each action.

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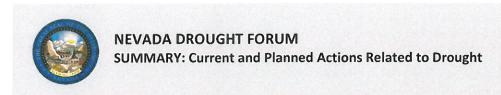
ACTION	Assigned watering days	
SUMMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.	
Action Taken	or Underway Action Planned	
ACTION	Promote water conservation messages, events, tips, etc.	
SUMMARY	In our ongoing efforts to protect and promote agriculture in Nevada, NDA will use existing water conservation campaign messaging and events, from partnering organizations, to educate Nevadans via our social media accounts, website, word-of-mouth, etc. NRS 561.214 and 561.18	
Action Taken	or Underway Action Planned	
ACTION		
SUMMARY		
Action Taken	or Underway Action Planned	
ACTION		
SUMMARY		
Action Taken	or Underway Action Planned	
ACTION		
SUMMARY		
Action Taken	or Underway Action Planned	
ACTION		
SUMMARY		

Action Planned

What types of topics/issues would you like the Nevada Drought Forum to address?	



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#### CONTACT INFORMATION

Nevada Department of Wildlife

**AGENCY NAME** 

STREET ADDRESS		CITY, STATE ZIP	
1100 Valley Rd		Reno, NV 89512	
CONTACT NAME	TITLE		
lack Robb	Deputy Director		
CONTACT PHONE	EMAIL		
775-688-1591	jrobb@ndow.org		
BOUT THE AGENCY AGENCY TYPE (Check One)			
Municipality State	Agency Tribe	Federal	Other
VATER SUPPLY SOURCES (Check al			
Groundwater	Surface Water (Des	cribe sources)	□N/A
SERVICE AREA DESCRIPTION (Size,	number of customers served, loca	ation)	
ROUGHT IN NEVADA			
riefly summarize how drought has	s impacted operations, resource a	evailability and/or planning	g activities (500 words)
he drought impact on the wildl			
levada Department of Wildlife's	Marketine and the second of th		
Nevada Department of Wildlife's	approach to the ongoing dro	ught conditions by division	on.

# Nevada Department of Wildlife Nevada Drought Forum Current and Planned Actions Related to Drought May 15, 2015

#### **Habitat Division**

# Water development

Action: Conduct monitoring of certain wildlife water developments. (Action Underway)

Summary: Visit wildlife water developments and assess water capacity and supply. Ascertain whether the water development will provide sufficient water through the summer and early fall to support local wildlife populations.

Action: Conduct emergency water hauls as necessary. (Action Planned)

Summary: When monitoring of wildlife water developments indicates that water supply is dropping and unlikely to meet water demand, haul additional water to the site. Fill water storage tanks through use of rotor-wing aircraft or vehicle, depending on access requirements.

Action: Continue to construct wildlife water developments to benefit Nevada's Wildlife. Summary: Prioritize new constructions based on the greatest need by evaluating drought related decreases in natural water source availability.

#### **Technical Review**

Action: Comment on Federal Land Management Agencies Drought Plans.

Summary: The Bureau of Land Management has national policies guiding drought responses, and NDOW engages through resulting processes to assure that wildlife habitats are not being sacrificed at the expense of other discretionary uses.

Action: Review and Comment on Projects Permitted through the NEPA process on Federal Lands

Summary: NDOW reviews every NEPA project on Federal lands to avoid, minimize and mitigate impacts to wildlife and their habitats. During the drought we pay special attention to potential impacts surrounding availability to water and instream flows.

Action: Review and Comment on Wildhorse and Burro Gathers on Federal Lands

Summary: NDOW continues to highlight the conflict between wildlife and wild horse and burro populations for resources on public lands. With most of Herd Management Areas being over 200 percent of their prescribed Appropriate Management Level's wildlife have already been negatively impacted even without the influence of this long term drought.

# **Wildlife Management Areas**

Action: Transfer of water from the Carson Lake Wetlands to Lahontan Reservoir

Summary: NDOW's water allocation from TCID will remain in Lahontan Reservoir to help sustain the fishery and benefit public recreation this season. This water is normally used to enhance other wetlands in Lahontan Valley.

Action: Replacing open ditch irrigation systems with PVC pipe.

Summary: Overton, Kirch, Key Pittman, and Steptoe Valley WMAs have had on-going water conservation projects to replace open ditches with PVC pipe.

Action: Managing fewer acres of wetlands and ponds.

Summary: Reduced water supplies over the last few years has led the WMAs to shift water management towards primary impoundments resulting in fewer seasonal wetlands and moist-soil units. This decreases the amount of habitat for wildlife and public recreation.

#### Restoration and Rehabilitation:

Action: Prepare for increased wildfire impacts across important wildlife habitats.

Summary: Increase funding proposals and support to prepare for upcoming fire rehabilitation needs and increased competition for available seed.

Action: Actively plan for and modify restoration actions to factor in the drought related influences.

Summary: Evaluate treatment location, design and desired vegetation response and prioritize those with greatest possibility to obtain desired goals.

Action: Prioritize pinyon and juniper (P/J) treatment projects to improve site specific water budgets.

Summary: Removal of P/J encroachment often increases availability of received precipitation thereby increasing quantity and productivity of the sites herbaceous component benefiting wildlife densities and diversity.

#### Game Division

Game is surveyed annually in most cases, although some surveys have multi-year rotations. When drought occurs, recruitment generally is reduced. With reduced recruitment, populations generally decline as well. For big game, the drought has probably affected mule deer more than others. Reduced populations generally mean the amount of time that we need to spend conducting surveys increases because it is harder to find enough deer to sample in generating estimates of demographic parameters.

Action: Consequently we must spend more time on the ground and in the air surveying, which increases our expenditures. Smaller game, like sage grouse, can be influenced more rapidly than larger game, like deer.

Summary: Drought can substantially influence distributions of wildlife, and competition around water sources for water and forage can be exacerbated by feral horses that are also dealing with drought.

Reductions in wildlife populations results in reductions in tags. This reduces revenue to the agency, which is a substantial issue because NDOW is primarily a self-funded agency. As drought requires more work and maintenance, we often see reductions in revenue at the same time, making drought management a challenge.

Action: When reductions in wildlife populations generates reductions in tags, budgetary adjustments must be made to accommodate reduced revenues.

Summary: Drought may reduce agency revenue and ability to match US Fish and Wildlife Federal Aid Grants.

Reductions in deer tags and fewer small game to hunt also affects local communities. A recent national survey determined that the average hunter contributes between \$200-300/day in addition to license and tag fees, much of which is spent in local communities, to participate in hunting. This can be a substantial economic effect for local businesses, especially in small, rural communities.

Action: No agency action is needed to address the effect, although local communities may feel reduced economic benefits from hunting.

Drought effects on habitat may be dramatically realized through wildfire. Wildfire through natural or anthropogenic initiation has the potential to damage, sometimes irreparably, habitat on which wildlife is dependent. This may influence sage grouse and potential for ESA listing consideration or mule deer recruitment. Currently, NDOW is investing in habitat restoration to restore previously damages from fire that resulted in increased cheat grass and decreased sagebrush distribution. Restoration of habitat is expensive, difficult to achieve, and frequently requires multiple years of sustained effort. Even then, benefits are seldom seen for over a decade. Habitat loss is an incredibly costly detrimental effect that may be realized due to wildfire during extended drought.

Action: NDOW expends greater amounts on habitat restoration following periods of drought. This financial commitment affects NDOW's ability to expend resources on other priority items.

Nuisance wildlife conflicts are expected to increase due to drought conditions. Water availability and forage quality is reduced within wildland conditions during drought periods, and many wildlife species (from rabbits to deer) move into urban landscapes where water and manicured lawns provide improved resources. In some cases, urban residents may actually place water and feed specifically for wildlife, increasing the probability that wildlife will enter these areas. These relatively non-intrusive species may at times be considered a nuisance to some

residents. Even more of an issue are the predators that often pursue these prey items, including coyotes, mountain lions, and bears. Bears are likely to increase their use of any anthropogenic food source, including trash, apiaries, or apple orchards during drought conditions. The response to urban wildlife conflicts is certain to increase the amount of time and human resources NDOW will need to expend, and the effect to NDOW budget will be dramatic because Federal Assistance Grants are ineligible for expenditure on nuisance wildlife and sportsmen are reluctant to support the use of license and tag fees for this purpose.

Action: NDOW must commit greater resources to address potential human-wildlife conflicts during periods of extended drought.

Summary: NDOW expenditures on human-wildlife conflicts are not eligible to be spent from US Fish and Wildlife Federal Aid grants, but must come from a state fund source. The only source is fees from sportsmen generated fees if no general fund monies are available.

### **Fisheries Division**

Drought effects have and continue to severely impact fisheries resources statewide. Reduced streamflows and low reservoir levels, particularly in mid-summer through fall, have directly affected important sport fisheries and reduced the ability to stock catchable fish to maintain recreational fisheries and the expectations of anglers. Although many priority native aquatic species have evolved under periodic drought conditions and have so far shown limited effects, ongoing drought has had a significant negative impact on the maintenance and recovery of some native trout species such as Lahontan cutthroat trout in areas of Northern Nevada.

Action: Modified fish stocking schedules for recreational stream fisheries.

Summary: Where drought impacts are anticipated on fishable waters, fish stocking schedules have been advanced 1-2 months to maximize fishing opportunity before low summer flow conditions impact angler success.

Action: Modify fish stocking allocations for reservoir fisheries.

Summary: When drought has or is anticipated to significantly affect reservoir storage levels, fish stocking allocations have been reduced or moved to other waters to minimize potential loss of the fisheries.

Action: Maintain reservoir minimum pool agreements.

Summary: NDOW staff is actively working with irrigators and other water right holders to maintain reservoir minimum pool agreements and minimize drought impacts to reservoir fisheries.

Action: Unprotected fish species management at Rye Patch and Lahontan.

Summary: NDOW is actively working with commercial fisheries at Rye Patch and Lahontan reservoirs to remove excess amounts of carp biomass and reduce drought impacts on the sport fisheries.

Action: Modification of sport fish harvest regulations.

Summary: Where severe drought impacts are anticipated that are likely to lead to loss of a sport fishery, NDOW has worked with the NBWC to remove harvest restrictions and allow maximum public harvest and use of the resource before loss of the fishery. This has been used in 2013 and 2014 but no actions are anticipated in 2015 (yet) (NRS 501.181(4)(a))

Action: Evaluation of Mason Valley Fish Hatchery water use.

Summary: NDOW staff is evaluating future water use requirements and the potential of developing water recirculation capability at Mason Valley Hatchery to address possible future constraints on groundwater availability. Any modification to hatchery systems would occur in future fiscal years.

## Wildlife Diversity Division

Drought will negatively effect several species of conservation priority, particularly those species dependent on riparian cooridors and wetlands. Diversity Division will primarily be monitoing responses to drought of our species of conservation priority.

Action: Survey endangered species in riparian corridors for drought response.

Summary: Population surveys of riparian dependent birds (Southwestern Willow Flycatcher, Yellow-billed Cuckoo, and clapper rails) in southern NV and along portions of the Carson River.

Action: Maintain breeding status of Southwestern Willow Flycatcher information in long-term database.

Summary: Through a contracted effort with SWCA, NDOW maintains a 15-year dataset for movement tracking and drought response of this endangered species. Monitoring will continue in 2015.

Action: Monitor waterbirds and shorebirds in critical wetland habitats.

Summary: NDOW will continue to monitor critical wetlands for shorebirds and waterbirds, and work with parners (federal, state and private) to provide water enhancements during the drought. Focal areas include Mason and Lahontan Valleys.

Action: Survey aspen for Northern Goshawk.

Summary: Northern Goshawks are a priority species for Diversity and it is expected that ongoing drought will decrease suitable nesting habitat for this species that depends on mature aspen stands. Surveys were initiated early this spring and will continue into the early part of summer to better understand where Goshawks are nesting and then monitor their nesting success.

Action: Habitat enhancements.

Summary: NDOW has conducted riparian restoration projects to enhance native habitats and make them more resilient during periods of drought. Some of these efforts include: fencing and

protecting of riparian aspen stands (northeastern Nevada); removing invasive Russian olive trees and replanting with native trees (Lincoln County); fencing and protecting native willow stands at Key Pittman WMA; fencing numerous natural springs around the state; and repairing headcuts and other stream issues all in an effort to keep water on the ground longer.

Action: NDOW's Private Lands Program is working with landowners statewide to address habitat issues.

Summary: NDOW's Private Lands Program is working with landowners statewide to address habitat issues on private property and public allotments directly or indirectly impacted by drought. Funding is provided to Conservation Districts to remove invasive and water thirsty trees such as Pinyon Juniper growing in meadows and around springs, and also the removal of Tamarisk trees in Beatty and other regions. Funding has been provided to Lincoln County for debris removal in the Pahranagat Valley to improve irrigation efficiency while addressing wildlife habitat needs. Funding and technical support is provided to landowner groups like the Stewardship Alliance of Northeast Elko (SANE) to provide assistance and coordination with the Natural Resources Conservation Service in order to address water/ livestock distribution.

### **Conservation Education Division**

Action: Respond to media inquiries.

Summary: The impact of drought on wildlife has been a popular topic in the news media. Media inquiries have been met with timely and appropriate responses.

Action: Proactively communicate drought related messages.

Summary: Where drought has impacted agency constituency (ie. early fish stocking, urban wildlife interaction, boating safety, etc.) messages have been communicated through the news media and directly to customers in a proactive manner.

Action: Social media engagement on drought issues.

Summary: Continue to engage in a two-way dialog with concerned citizens regarding drought's impact on wildlife through agency social media channels including Facebook, Twitter, podcast and blog.

Action: Inform and Educate public on drought related human/wildlife interaction.

Summary: Proactively educate communities on best practices for reducing human/wildlife interaction, mainly in regard to human interaction with bears and coyotes in urban areas. Due to drought pressures, wildlife interaction in urban areas is increasing and education for constituencies on issues such as securing trash, reducing attractants and protecting pets is consistently being provided.

#### **Law Enforcement Division**

Low water levels at Nevada lakes and reservoirs have significantly reduced boating recreation activity. This has changed our summer patrol planning.

Action: Coordinate with fisheries division on early fish stocking activities.

Summary: Because of the early fish stocking schedule, we have changed our stream fishing patrols from May and June to Late March through May. This should target the peak angler days for small streams during which "over limit" and "fishing without a fishing license" cases are common immediately following a stream stocking.

Action: Planning for summer boating safety patrols depending on expected water levels at lakes and reservoirs in Northern Nevada.

Summary: We will divert patrol resources from bodies of water that are expected to be at very low levels, such as Rye Patch and Lahontan Reservoirs, to bodies of water that are expected to have much better water levels such as South Fork Reservoir and Lake Tahoe.

Action: Planning for summer boating safety patrols depending on expected water levels on the Colorado River System.

Summary: Water levels on Lake Mohave and the Colorado river at Laughlin should be fairly consistent relative to other years, so patrol plans will continue as normal this year. Lake Mead continues to drop and restrict access to certain marinas and portions of the lake, so patrol activities will be directed to the busier portions of the lake.

Action: Planning for an increase in urban interface activity of Sierra Front bears, Clark County coyotes, and other urban wildlife.

Summary: We will work with other NDOW divisions, federal agencies, and the public to address and mitigate urban wildlife issues. This will include working on staffing levels and response protocol for calls that come in from the public, and educating the public to minimize attractants on their property. In the instance of a call that threatens public safety, we will attempt to respond in a timely manner to help address public safety concerns.



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#### **CONTACT INFORMATION**

AGENCY NAME		
Nevada Division of Emergency Manageme	ent	
STREET ADDRESS		CITY, STATE ZIP
2478 Fairview Drive		Carson City, NV 89701
CONTACT NAME	TITLE	
Bill Elliott	Lead Planner	
CONTACT PHONE	EMAIL	
775-687-0308	welliott@dps.state.nv.us	

# **ABOUT THE AGENCY**

AGENCY TYPE (Check O	ne)			
Municipality	State Agency	Tribe	Federal	Other
WATER SUPPLY SOURCE	ES (Check all that appl	y)		
Groundwater		Surface Water (Desc	ribe sources)	⊠N/A
SERVICE AREA DESCRIP	TION (Size, number of	customers served, loca	tion)	
State of Nevada				

#### **DROUGHT IN NEVADA**

Briefly summarize how drought has impacted operations, resource availability and/or planning activities (500 words)

From the beginning of the Secretarial Drought Emergency Declaration the Nevada Division of Emergency Management (NDEM) has maintained a level one activation of the State Emergency Operations Center (SEOC) to manage drought related preparedness, mitigation, response and recovery activities to support local jurisdiction drought response. NDEM has assigned one position as the drought point of contact and has taken the lead in providing the Governor with situation analysis, reporting and consequence management. NDEM has participated in the development of the State Drought Response Plan, the Drought Emergency Incident Action Plan and the State Drought Strategic Plan.

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

If you are a state agency, please cite applicable authority for each action.

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$\boxtimes$	Action Take	en or Underway   Action Planned
ACT	ION	Assigned watering days
SUN	IMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.

Action Taken	or Underway Action Planned
ACTION	Maintain Situation Awareness
	NDEM has developed a website www.drought.nv.gov to provide information about the drought situation and resources available to communities, tribes and businesses.  NDEM publishes a monthly drought situation report which details drought activity in Nevada.
SUMMARY	NDEM sponsors drought status reports with emergency management and water stakeholders.
	NDEM through the Threat and Hazards Identification and Risk Analysis has determined that drought is the number 2 concern statewide for communities.

Action Taken	or Underway Action Planned	
ACTION	Prepare operationally to provide resources to support local drought emergency response.	
NDEM has activated the State Emergency Operations Center to support local emergency response with necessary resources, information and drought related expertise.		
	To date NDEM has responded to two emergency water shortage requests from Walker Lake the Nevada State Prison in Lovelock.	and

ACTION	Provide recovery assistance to the citizens of Nevada
SUMMARY	NDEM has partnered with the USDA Farm Service Agency to provide information on federal low
SOMMAN	interest drought recovery loans.

Action Taken	or Underway Action Planned	
ACTION		
SUMMARY		

|--|

ACTION	
SUMMARY	
Action Taken	or Underway Action Planned
ACTION	
SUMMARY	
What types of to	pics/issues would you like the Nevada Drought Forum to address?



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#### **CONTACT INFORMATION**

**AGENCY NAME** 

NDEP			
STREET ADDRESS		CITY, STATE ZIP	
901 South Stewart Street, Suite 4001		Carson City, NV 89701	
CONTACT NAME	TITLE		
David Gaskin	Deputy Administrator		
CONTACT PHONE	EMAIL		
775-687-9302	dgaskin@ndep.nv.gov		
ABOUT THE AGENCY  AGENCY TYPE (Check One)			
Municipality State Agency	Tribe	Federal   Other	
WATER SUPPLY SOURCES (Check all that app			
☐ Groundwater ☐ Surface Water (Describe sources) ☐ N/A			
SERVICE AREA DESCRIPTION (Size, number of customers served, location)			
Statewide			
DROUGHT IN NEVADA  Briefly summarize how drought has impacted	•		
Reduced availability of ground and surfactinfrastructure improvements, and planning			e,

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

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$\triangleright$	Action Take	n or Underway	Action Planned
A	CTION	Assigned watering days	
<b>SUMMARY</b> All customers are prescribed assigned watering days that change seasonally. For example, assigned day in winter and three assigned days in spring and fall.			

Action Taken or Underway Action Planned				
ACTION Increase reuse of treated wastewater to save fresh water resources				
SUMMARY	NDEP has formed a statewide working group to discuss ways to increase reuse of treated wastewater. This diverse group of representatives - state and local, urban and rural - will determine actions to enhance the State's water reuse program and help preserve scarce fresh water resources.			

Action Taken or Underway			
ACTION	Drinking water infrastructure integration		
SUMMARY	NDEP's Safe Drinking Water State Revolving Fund (DWSRF) is working with Truckee Meadows Water Authority (TMWA) to fund a project to integrate the North Valley Water Supply (aka Vidler or Fish Springs Ranch Project) into TMWA's water distribution infrastructure in the Stead-Lemmon Valley area. The project consists of 29,000 lineal feet of 24-inch water main, interconnections to the existing distribution system, hydraulic and pressure control facilities, communications and SCADA elements and finished water storage facilities. The estimated project cost is \$18 million, of which \$15 million will be financed by DWSRF and \$3 million paid by TMWA. The project is scheduled to go to construction in December and be on-line by June 2016, pending funding approval.		

ACTION	Numerous projects and proposals to augment or replace drinking water supplies		
SUMMARY	NDEP is working with a number of drinking water purveyors and local jurisdictions to provide assistance on drought impacted water systems, and help with planning for those that anticipate potential problems in the future. Examples include Churchill County, Spring Mountain Youth Camp, Montello, Douglas County, Walker Lake GID, Deer Creek Spring (USFS), and Lahontan Dam State Park.		

Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			

Action Taken	or Underway Action Planned			
ACTION				
SUMMARY				
Action Taken	or Underway Action Planned			
ACTION				
SUMMARY				
What types of topics/issues would you like the Nevada Drought Forum to address?				
Coordination and communication to ensure we all work together constructively and efficiently.				



When complete, please return to:



Questions about the Form chunt@gov.nv.gov 1-775-684-5670

Under the <u>Governor's Executive Order 2015-03</u>, issued April 8, 2015, state agencies, municipal water providers and federal agencies are requested to provide a summary of current and planned actions related to drought. This information must be provided to the Nevada Drought Forum by no later than **May 15, 2015.** Please use the following form to submit your agency's information.

#### CONTACT INFORMATION

CONTACT INFORMATION			
AGENCY NAME			
Nevada Division of Forestry			
STREET ADDRESS		CITY, STATE ZIP	
2478 Fairview Drive		Carson City NV 89	701
CONTACT NAME	TITLE		
Bob Roper	State Forester/Firew	arden	
CONTACT PHONE	EMAIL		
775 684-2501	broper@forestry.nv.	gov	
ABOUT THE AGENCY			
AGENCY TYPE (Check One)			
Municipality State A WATER SUPPLY SOURCES (Check all		Federal	Other
Groundwater		Surface Water (Describe sources)	
SERVICE AREA DESCRIPTION (Size, n	umber of customers served, loca	tion)	
DROUGHT IN NEVADA			
Briefly summarize how drought has	impacted operations, resource a	vailability and/or planning	g activities (500 words)

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

If you are a state agency, please cite applicable authority for each action.

	en or Underway	<ul><li>Action Planned</li></ul>	
ACTION	Assigned watering do	nys	
SUMMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.		
Action Taken	or Underway	Action Planned	
ACTION	Request all NDF facili	ities achieve a 10% water reduction	
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION	Create budget and ac	ction plan to utilize water reduction fixtures	
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION	Educate NDF employees on water reduction practices		
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION	Increase fire prevent	ion preparedness - use less water	
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION	Enhance fire fighting	options - reduce fire size and use less water	
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			

What types of topics/issues would you like the Nevada Drought Forum to address?				



When complete, please return to:



Questions about the Form chunt@gov.nv.gov 1-775-684-5670

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AGENCY NAME				
Nevada Division of Minerals				
STREET ADDRESS		CITY, STATE ZIP		
4000 King Street, Suite 106		Carson City, NV 89703		
CONTACT NAME	TITLE			
Richard Perry	Administrator			
CONTACT PHONE	EMAIL			
775-684-7040	rmperry@minerals.nv.go	v		
ABOUT THE AGENCY  AGENCY TYPE (Check One)  Municipality  State Agency	Tribe	Federal	Other	
WATER SUPPLY SOURCES (Check all that app		Печени		
☐ Groundwater ☐ Surface Water (Describe sources) ☐ N/A				
SERVICE AREA DESCRIPTION (Size, number of	f customers served, location)			
The Division of Minerals is located in rented office facilities in Carson City and Las Vegas.				
DROUGHT IN NEVADA				
DROUGHT IN NEVADA  Briefly summarize how drought has impacted No impact.	d operations, resource availa	bility and/or planning ac	tivities (500 words)	

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

Action Taken or Underway

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

☐ Action Planned

If you are a state agency, please cite applicable authority for each action.

Sa

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ACTION	Assigned watering days			
SUMMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.			
Action Taken	or Undorway	Action Planned		
		building in Carson City has bid removal of grass and installation of xeriscaping		
ACTION	to reduce seasonal outside water use. Decision pending by building owner.			
SUMMARY				
	,			
Action Taken	or Underway	Action Planned		
ACTION				
SUMMARY				
Action Taken	or Underway	Action Planned		
ACTION				
SUMMARY				
Action Taken	or Underway	Action Planned		
ACTION				
SUMMARY				
Action Taken	or Underway	Action Planned		
ACTION				
SUMMARY				
Action Taken	or Underway	Action Planned		
ACTION				
SUMMARY				

# What types of topics/issues would you like the Nevada Drought Forum to address?

Conservation methods for water use being used or tested in Nevada by beneficial use.



When complete, please return to:



Questions about the Form chunt@gov.nv.gov 1-775-684-5670

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#### **CONTACT INFORMATION**

AGENCY NAME				
Division of State Lands				
STREET ADDRESS		CITY, STATE ZIP		
901 S. Stewart Street Suite 5003		Carson City NV 89701		
CONTACT NAME	TITLE			
Charles Donohue	Administrator			
CONTACT PHONE	EMAIL			
775-684-2720	cdonohue@lands.nv.gov			

# **ABOUT THE AGENCY**

AGENCY TYPE (Check One)						
□Mu	nicipality	⊠State Agency	Tribe	Federal	Other	
WATER	SUPPLY SOURCE	S (Check all that apply)				
	Groundwater		Surface Water (Des	cribe sources)	⊠N/A	
SERVIC	SERVICE AREA DESCRIPTION (Size, number of customers served, location)					
			_			

#### **DROUGHT IN NEVADA**

Briefly summarize how drought has impacted operations, resource availability and/or planning activities (500 words)

NDSL is the lead agency for the implementation of the State's commitment to the Environmental Improvement Program (EIP) at Lake Tahoe and is also responsible for the issuance of permits for structures on navigable water ways within the state. Due to the drought, the foresters on the resource team implementing the EIPhave been monitoring the associated stress on trees as a result of low precipitation. Also due to the drought, NDSL has anticipated a number of requests to either extend piers, relocate buoys or perform dredging activities as a result of low water conditions.

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

☐ Action Planned

If you are a state agency, please cite applicable authority for each action.

ACTION	Assigned watering days		
SUMMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.		
Action Taken	or Underway	Action Planned	
ACTION	Low water in state navig	gable waters	
SUMMARY		ded notice on what needs to happen if a permitee wants to relocate an tp://www.lands.nv.gov/docs/Low-Water-Relocation-Website-	
Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION		<u> </u>	
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			
Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			

# What types of topics/issues would you like the Nevada Drought Forum to address?

Possible impacts to bnavigation and public safety



When complete, please return to:



Questions about the Form chunt@gov.nv.gov 1-775-684-5670

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#### **CONTACT INFORMATION**

AGENCY NAME					
Nevada Division of Water Resources	Nevada Division of Water Resources				
STREET ADDRESS		CITY, STATE ZIP			
901 South Stewart Street, Suite 2001		Carson City, NV 89701			
CONTACT NAME	TITLE				
Jason King	State Engineer				
CONTACT PHONE	EMAIL				
775-684-2870	jking@water.nv.gov				

# **ABOUT THE AGENCY**

AGE	NCY TYPE (Check O	ne)			
	Municipality	State Agency	Tribe	Federal	Other
WA	TER SUPPLY SOURCE	ES (Check all that apply			
	Groundwater	Re Riv de an Co an	rer and water rights cree courts, such as d Humboldt Rivers. mmission has oversid the Division of Wa	te water except the Colorado under the jurisdiction of the Truckee, Carson, Walker The Colorado River ight of the Colorado River	⊠n/a
SERVICE AREA DESCRIPTION (Size, number of customers served, location)					
Stat	ewide				

#### **DROUGHT IN NEVADA**

Briefly summarize how drought has impacted operations, resource availability and/or planning activities (500 words)

Reduced availability of surface water and groundwater has required NDWR to intensify its efforts in managing both of these sources. These efforts include increased field work by staff, including additional water-level measurements, water-use readings, independent auditing of groundwater discharge and regulation of surface water flows pursuant to priority to name a few.

The number of complaints regarding water use in violation of Nevada's water law are increasing and compliance with the law is pursued.

Additionally, NDWR issued curtailment orders in two groundwater basins limiting the amount of groundwater that can be pumped using supplemental groundwater rights for irrigation by 50%. Those orders were appealed and enjoined. A hearing will be scheduled for later in the year to discuss the merits of potential new curtailment orders if drought persists.

This summer, NDWR will be holding workshops in groundwater basins that are experiencing unacceptable water-level declines, as well as those basins that are severely over-appropriated and are in need of additional management in order to work with the stakeholders and get their input on the drought and ideas on how to proceed should the drought continue.

#### **INSTRUCTIONS FOR FOLLOWING SECTION:**

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

If you are a state agency, please cite applicable authority for each action.

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$\boxtimes$	Action Take	n or Underway   Action Planned
ACT	TION	Assigned watering days
SUI	MMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.

<b>⊠</b> Action Taken	or Underway Action Planned	
ACTION	Increased field work to monitor health of groundwater basins and stream systems.	
SUMMARY	NDWR has made it a priority to send more staff more frequently into the field to monitor usage. While in the field, staff is measuring water levels to see how the aquifer is responsible to the drought and pumping; staff is indepently verifying water discharge from wells using a portable totalizing meter in order to compare its flow to the flow being measured by the installed totalizing meter; staff is verifying pumping to ensure that users are within the lir their water rights; and as an ancillary task, staff is taking notes on types of crops being greated types of irrigation practices being used, ie. flood, pivots, drip systems, etc.	ding to mits of

Action Taken	or Underway Action Planned
ACTION	Issued new designation orders in various groundwater basins.
SUMMARY	NDWR has issued approximately 10-12 orders in the past year that designate groundwater basins throughout the state. Once a basin is "designated", additional statutory tools become available to the State Engineer for management of the water resources in those groundwater

basins.

Action Taken	or Underway Action Planned
ACTION	Issued orders to entirely shut down water appropriations in certain groundwater basins and also
ACTION	require totalizing meters on wells.
	In basins that are fully appropriated and experiencing steep water level declines, orders were
	issued to entirely shut down any new appropriation of groundwater in the basin (domestic wells
	are exempt). This lets the public know that they are not able to get a new appropriation and
SUMMARY	therefore only transfers of existing rights will be available for a change in water use.
	Additionally, orders were issued in every groundwater basin located in the Humboldt River
	drainage that requires totalizing meters be installed on 99% of the wells by early 2016. This
	effort will help staff monitor water usage.

Action Taken	or Underway Action Planned	
ACTION	Issued order for curtailment of groundwater pumping.	
SUMMARY	Because of unprecedented groundwater level declines in two groundwater bsins, NDWR first time in its history, issued two curtailment orders requiring a 50% curtailment of all supplemental irrigation pumping. The orders were appealed, enjoined (stayed) and await hearing on the merits of the case.	

	or Underway   Action Planned	
ACTION	Public workshops.	
SUMMARY	NDWR has held, and will continue to hold public workshops throughout the state in those a where drought is hitting the hardest. Through collaboration with the stakeholders, it is hop that future plans and decisions will have buy-in from those impacted the most.	

<b>⊠</b> Action Taken	or UnderwayAction Planned	
ACTION	Expedite the processing of temporary applications filed for the transfer of water and the	
	processing of requests by well drillers to deepen or redrill wells that have dried up.	
SUMMARY	Because of the drought, numerous water right applications are being filed in order to mo water around to best serve the individual water right holder. Additionally, there is greate drilling activity due to wells drying up and/or pumping sand due to water level declines. I priority for NDWR staff to expedite these processes so that there is little or no interruption water deliveries.	r well It is a

# What types of topics/issues would you like the Nevada Drought Forum to address?

Since agriculture is the number one user of water in Nevada, it would be useful to hear about any example of successes and failures related to agricultural water use during drought. Examples such as changes in irrigation practices, water saving silica chips, other soil additives, watering at night time, use of lysimeters with irrigation practices to name a few.

As an agency that regulates water in Nevada, we would be interested in potential law or policy changes that promotes best management practies in protecing our water resources.



When complete, please return to:



Questions about the Form chunt@gov.nv.gov 1-775-684-5670

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#### **CONTACT INFORMATION**

AGENCY NAME		
Nevada State Parks		
STREET ADDRESS		CITY, STATE ZIP
901 S. Stewart Street, Suite 5005		Carson City, NV. 89701
CONTACT NAME	TITLE	
Eric Johnson Administrator		
CONTACT PHONE	EMAIL	
775 - 684-2771	emjohnson@parks.nv.gov	

# **ABOUT THE AGENCY**

AGENCY TYPE (Che	AGENCY TYPE (Check One)					
Municipality		e Agency	Tribe		Federal	Other
WATER SUPPLY SO	OURCES (Check a	all that apply)				
		$\boxtimes$ s	Surface Wate	er (Describe so	urces)	
Groundwat	or	Lahontan State Recreation Area		ea ea	□n/a	
Groundwat	.ет	Eag	le Valley Res	ervoir, Echo C	anyon Reservoir	□IN/A
SERVICE AREA DES	SCRIPTION (Size	, number of cເ	ustomers serv	ed, location)		
	5 1					
Northern Region		_				
Park	Location	Acreage	Visitors	Water Source	e	
Mormon Station	Genoa	300 acres	79,494	Municipal		
Dayton	Dayton	160 acres	37,439	Municipal		
Washoe Lake	Carson City	8,053 acres	222,731	Well		
Fort Churchill	Silver Springs	4,461 acres	72,594	Well		
Berlin Ichth	Austin	1,557 acres	6,088	Well		
Rye Patch	Lovelock	20,516 acres	s 51,631	Well		
Wild Horse	Elko	120 acres	15,438	Well		
South Fork	Elko	2,274 acres	93,009	Well		
Lahontan	Fallon	30,522 acre	s116,495	GWUDI		
Cave Lake	Ely	4,200 acres	62,026	Well		
Ward Charcoal	Ely	682 acres	7,113	Well		

Park	Location	Acreage	Visitors	Water Source
Spring Valley	Ursine	1,498 acres	103,464	Well
Echo Canyon	Ursine	1,045 acres	57,374	Well
Cathedral Gorge	Panaca	1,793 acres	59,014	Municipal
Beaver Dam	Lincoln Co	5,614 acres	4,873	Well
Kirshaw-Ryan	Caliente	1,713 acres	19,670	Well and spring water
Valley of Fire	Overton	45,959 acres	520,492	Well
Old Las Vegas Mo	ormon Fort	3 acres	10,964	Municipal
Spring Mtn Ranc	h Blue Diamo	nd 520 acres	269,450	Well and spring water
Big Bend	Laughlin	2,336 acres	68,780	Municipal
Lake Tahoe Neva	ıda State Parl	k- Numerous mar	nagement areas	<b>::</b>
	Incline Villa	ge 13,700 acres	1,139,063	Wells and municipal

#### **DROUGHT IN NEVADA**

# Briefly summarize how drought has impacted operations, resource availability and/or planning activities (500 words)

The drought has significantly lowered water levels in Lahontan reservoir, Rye Patch Reservoir, Washoe Lake, Wild Horse Reservoir, as well as Echo Canyon and Spring Valley reserviors, making boating and fishing difficult at these reservoirs. South Fork and Cave Lake still have water at this time but are being monitored as the drought conditions continue. Lake Tahoe's water level has dropped to the point that the boat ramp at Sand Harbor unusable and Cave Rock is effectively down to one lane. Berlin Ichthyosaur is under contract to have a new well drilled due the current water system failure. Lahontan is currently being explored for new well sites on the Dam side for a more stable water source. Water will have to be hauled from another source if current conditions continue. Valley of Fire is preparing to Drill a new well to replace a well that has had several issues over the past several years. Without a productive well, water will be hauled to the park to maintain health and safety standards for the park visitors.

Parks mentioned above experiencing decreased visititation due to low water levels are temporarily "repurposing" the draw to that park. This is being done thru increased interpretive programs using existing staff.

# **INSTRUCTIONS FOR FOLLOWING SECTION:**

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

If you are a state agency, please cite applicable authority for each action.

	en or Underway	☐ Action Planned	
ACTION	Assigned watering days		
SUMMARY	-	ed assigned watering days that change seasonally. For example, one I three assigned days in spring and fall.	
<b>⊠</b> Action Taken	or Underway	Action Planned	
ACTION	Monitor static water levels	s in wells	
SUMMARY	_	vels in wells will assist staff in determining if groundwater is lowering al water conservation measures.	
Action Taken	or Underway	Action Planned	
ACTION	Surveying for water in pre	peration for a new well at Lahontan / Valley of Fire.	
SUMMARY	Health and safety standard	ds as well as a stable dependable water source are needed.	
Action Taken	or Underway	Action Planned	
ACTION	Replace well at Berlin		
SUMMARY	Current system has failed. A new well must be drilled in order to maintain Health and Safety Standards.		
Action Taken	or Underway	Action Planned	
ACTION		kland Station, has been eliminated.	
SUMMARY	Public access to water sou	rces have been eliminated.	
Action Taken	or Underway	Action Planned	
ACTION	Reduced irrigation and spr	rinkling at parks with lawns and tree systems. Irrigation at the leen updated to a drip system and follows the Southern Nevada Water	
SUMMARY	Modified schedules will be put into place to conserve water where possible. Landscaping at the Southern Region HQ has been replaced with less water intense species, a drip system has been installed to deliver minimal water to specific locations.		
	or Underway	Action Planned	
ACTION	Statewide effort to replace	e standard restroom faucets with "hands-free" faucets and utilize	

	other water efficient fixtures.
SUMMARY	The "hands-free" faucets, as well as the other more efficient fixtures, being installed are more
water conscious, as they only run as long as the need exists.	

Wł	What types of topics/issues would you like the Nevada Drought Forum to address?		



When complete, please return to:

# **ATTACHMENT 1**

# NEVADA STATE PUBLIC WORKS DIVISION ADOPTED STANDARDS

7.4.6 All plumbing fixtures shall be specifically designed to conserve water. Maximum water usage by specific fixture type shall be as follows:

Water Closets 1.6 gallons per flush Urinals 0.125 gallons per flush

Restroom lavatories 0.5 gallons per minute (automatic shut-off)

Showers 1.75 gallons per minute

# NEVADA DROUGHT FORUM SUMMARY: Current and Planned Actions Related to Drought

Questions about the Form chunt@gov.nv.gov 1-775-684-5670

Under the <u>Governor's Executive Order 2015-03</u>, issued April 8, 2015, state agencies, municipal water providers and federal agencies are requested to provide a summary of current and planned actions related to drought. This information must be provided to the Nevada Drought Forum by no later than **May 15, 2015.** Please use the following form to submit your agency's information.

				TION
CONTA	<b>ICT</b>	INFO	KM/	NOILE

AGENCY NAME

Public Utilities Co	ommission			
STREET ADDRESS		CITY, STATE ZIP		
1150 E William			4.NV 89701	
CONTACT NAME	TITLE			
Breanne Potter	Commi	Commission Secretary		
CONTACT PHONE				
484-6167	bpotter a	puc.nv.go	V .	
ABOUT THE AGENCY		70	AMPERIOGET THANK	
AGENCY TYPE (Check One)				
<b>■</b> Municipality State Ag	ency Tribe	Federal	☐ Other	
WATER SUPPLY SOURCES (Check all th				
Groundwater	Surface Water (Des	scribe sources)	N/A	
SERVICE AREA DESCRIPTION (Size, nui	mber of customers served, loc	ation)		
Cason City Wate	rutility - P	roperty leas	red	
DROUGHT IN NEVADA				
Briefly summarize how drought has in	npacted operations, resource	availability and/or planning	g activities (500 words)	
N/A				
,				

# INSTRUCTIONS FOR FOLLOWING SECTION:

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

Action Planned

If you are a state agency, please cite applicable authority for each action.

Sa mp

ACTION	Assigned watering	ng days	
SUMMARY		e prescribed assigned watering days that change season winter and three assigned days in spring and fall.	ally. For example, one
Action Take	n or Underway	Action Planned	
ACTION	NIA	- Leased Property	
SUMMARY	property 1	- Leased Property management did advise swatering was	cutbeax 25%
		<u> </u>	
WATER BUTTLE PARKET COM APPEAR	n or Underway	Action Planned	
ACTION			
SUMMARY			
Action Take	n or Underway	Action Planned	
ACTION	il or orderway		
SUMMARY			
Action Take	n or Underway	Action Planned	
ACTION			
SUMMARY			
Action Take	n or Underway	Action Planned	
ACTION			
SUMMARY			
Action Take	n or Underway	Action Planned	
ACTION			
CHARLARY			

What types of topics/issues would you like the Nevada Drought Forum to address?

None



When complete, please return to:



Questions about the Form chunt@gov.nv.gov 1-775-684-5670

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#### **CONTACT INFORMATION**

AGENCY NAME				
State Public Works Division - Buildings & Grounds Section				
STREET ADDRESS		CITY, STATE ZIP		
515 East Musser Street, Suite 102		Carson City, Nevada 89701		
CONTACT NAME	TITLE			
Tom Federici, P.E.	Deputy Administrator			
CONTACT PHONE	EMAIL			
775-684-1807	tfederici@admin.nv.gov			

#### **ABOUT THE AGENCY**

AGE	AGENCY TYPE (Check One)				
	Лunicipality	State Agency	Tribe	Federal	Other
WAT	TER SUPPLY SOURC	ES (Check all that apply	)		
		$\boxtimes$	Surface Water (De:	scribe sources)	
$\boxtimes$	Groundwater	Gr	ound Water - Wells	at the Stewart Complex	□N/A
		Su	rface Water - Marle	ette Lake Water System	
SER\	/ICE AREA DESCRIP	TION (Size, number of o	customers served, loc	ation)	
Stev	vart Complex, Ca	rson City - Domestic V	Vater and Landscap	e Irrigation	
Marlette Lake Water System - Serves Storey County (only source of water for Storey County), and supplies Carson					
City	with raw water o	during peak summer d	emands		

#### **DROUGHT IN NEVADA**

#### Briefly summarize how drought has impacted operations, resource availability and/or planning activities (500 words)

Drought conditions have affected B&G's operations in two ways; first, watering of landscaped areas around State Buildings has been curtailed to the point of sustaining existing vegetation only and not increasing landscaped areas. Second, the Marlette Lake Water System's water storage reservoirs at Marlette Lake and Hobart Reservoir are severely down due to lack of runoff from a sparse snowpack. This raw (untreated) water is used to supply water needs for Storey County and also supplements Carson City's water system. During normal seasons the water supplied from runoff sustains both systems needs until at least midway through the summer. When the runoff subsides below the required minimum demands, water is pumped from Marlette Lake into Hobart Reservoir and demands are satisfied. However, the water level in Marlette Lake has always been able to be maintained above a minimum agreed to level to maintain water clarity in the Lake and provide adequate volume for NDOW requirements in support of their fish-hatching operations. A meeting is scheduled the week of May

18, 2015 with Carson City, NDOW, NSPWD, and Marlette Lake Water System representatives to discuss the drought conditions and management of the Marlette Lake water asset through not only this summer and fall seasons, but also into next year should the drought continue this winter. Improvements in the "catchments" positioned on the east slope of the Sierra Nevada Mountains began last year with the rebuilding of Catchment #6, and rebuilding of three additional catchments will be completed this season. The purpose of these catchments is to channel runoff from springs into the water system for distribution to the two entities mentioned. The improvements in the Catchment system will increase the amount of runoff which will decrease the amount of water that will need to be pumped from Marlette Lake in normal years. The Stewart Complex has domestic water and irrigation water provided from an onsite well and from Clear Creek which is west of the Stewart Complex. There are only approximately 48.5 acre-feet of water rights available from Clear Creek, and there are plans in process for eventually connecting to the Carson City water system to provide fire water protection and domestic water, including reduced pressure backflow protection, for the Stewart Complex and leaving the irrigation water to be supplied by the well and Clear Creek.

#### INSTRUCTIONS FOR FOLLOWING SECTION:

Utilize the following boxes to outline specific activities your agency has taken or is planning to take in response to drought. Please use additional sheets as necessary.

If you are a state agency, please cite applicable authority for each action.

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	en or Underway   Action Planned		
ACTION	Assigned watering days		
SUMMARY	All customers are prescribed assigned watering days that change seasonally. For example, one assigned day in winter and three assigned days in spring and fall.		

	or Underway \overline{\text{Action Planned}}
ACTION	Landscape Watering
SUMMARY	All State properties in Northern and Southern Nevada managed by B&G with landscaping are watered in accordance with assigned watering days consisting of no more often than every other day with no watering on Sundays or Mondays which are set aside for mowing.  Additionally, there are no more than three daily cycles of watering lasting no more than 15 minutes for each station. Shaded areas currently have cycle times of 6-8 minutes. Planned action is to reduce the number of cycles to two each day and to reduce the cycle times to 10 minutes for each station in sun exposed areas while shaded area cycle times will remain at 6 minutes.

Action Taken	or Underway \overline{\text{Action Planned}}
ACTION	Plumbing Fixtures in B&G Buildings
SUMMARY	All new construction in Northern and Southern Nevada is required to have water conserving plumbing fixtures installed that meet the requirements of the latest Nevada State Public Works Division Adopted Standards (see excerpt in Attachment 1). The intent of the B&G Section is to upgrade all plumbing fixtures in B&G controlled facilities to the NSPWD standards for water conserving fixtures in order to reduce water consumption and water costs. Whenever a restroom remodel project is taken on by B&G, or if repair of any given fixture is required, the

plumbing fixtures are brought up to NSPWD standards. However, budgeting has not been
provided to bring all fixtures up to the water conserving standards at this time.

	or Underway \square Action Planned
ACTION	Marlette Lake Water System
SUMMARY	As mentioned in the Drought Summary statement above, improvements in the "catchment" system along the east slope of the Sierra Nevada Mountains have begun and will continue this season and next season to approximately double the system's ability to divert runoff from springs for conveyance to the two entities the system supplies raw water to. The larger issue for the Marlette Lake Water System right now will be the proper management of the limited resources presently stored at Marlette Lake and Hobart Reservoir. The upcoming meeting referenced above will require realistic goals to be agreed to by all participating parties for this year and all future seasons.

	or Underway \overline{\text{Action Planned}}
ACTION	Stewart Complex Water Usage
SUMMARY	Irrigation of existing landscaped areas at the Stewart Complex will be adjusted as described in the "Landscape Watering" section above, and water use is being monitored continuously to not only ensure that the facility does not exceed the alotted 48.5 acre-feet, but also to reduce water consumption overall. The Landscape Master Plan for the Stewart Complex that was prepared and adopted several years ago will not be implemented at this time as the drought conditions and lack of available water required for the Plan necessitate putting the plan on hold.

Action Taken	or Underway	Action Planned	
ACTION			
SUMMARY			
Action Taken or Underway Action Planned			
ACTION			

# ACTION SUMMARY

# What types of topics/issues would you like the Nevada Drought Forum to address?

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.



When complete, please return to: