



STAFF REPORT

Report To: Open Space Advisory Committee

Meeting Date: February 25, 2019

Staff Contact: Ann Bollinger, Open Space Administrator
Lyndsey Boyer, Senior Natural Resource Specialist

Agenda Title: For Possible Action: To approve the annual report for calendar year 2018 regarding activities of the Open Space Division to be submitted to the Board of Supervisors.

Staff Summary: Carson City Municipal Code 13.06.090 states that the Committee shall provide an annual report of its activities to the Board of Supervisors. The information has been organized into the following categories: Acknowledgements, Activities and Events, Capital Improvement Projects, Land Acquisitions, and Land Management. Staff drafted a report in newsletter format which highlights the achievements and successes.

Agenda Action: Formal Action/Motion

Time Requested: 10 minutes

Proposed Motion

I move to approve the annual report for calendar year 2018 regarding activities of the Open Space Division to be submitted to the Board of Supervisors.

Board's Strategic Goal

Quality of Life

Previous Action

N/A

Background/Issues & Analysis

N/A

Applicable Statute, Code, Policy, Rule or Regulation

Carson City Municipal Code 13.06.090

Financial Information

Is there a fiscal impact? Yes No

If yes, account name/number:

Is it currently budgeted? Yes No

Explanation of Fiscal Impact:



OPEN SPACE



Carson City Parks, Recreation & Open Space Department

Report to the Board of Supervisors from the Open Space Advisory Committee

January – December 2018

Dear Mayor Crowell and Board of Supervisors,

As required by Section 13.06.090 of the Carson City Municipal Code, it is our honor to present to you the following report of the activities conducted by the Open Space Advisory Committee (OSAC) in 2018. The information provided is arranged into the following categories:

- Acknowledgments
- Activities and Events
- Capital Improvement Projects
- Land Acquisitions
- Land Management

2018 was a busy and exciting year filled with lots of projects and activities! We welcomed new staff to assist in the management of 6,938 acres of open space throughout Carson City. Jared Whitaker joined us as our first Open Space Maintenance Coordinator and Joey Kelso as our Natural Resource Management AmeriCorps Intern. In addition, Marena Disbro started as the Carson City Weed Coalition Coordinator (part-time position). This position is supervised by the Open Space Division who has knowledge and expertise with holistic landscape and vegetation management.

Acknowledgements

The Acknowledgements category was added at the request from OSAC to specifically highlight extra assistance provided to the Open Space Program. This includes grant awards and volunteers efforts.

Grant Awards

Project Name / Area	Grantor	Grant Award	Period	Quality of Life-Open Space contribution (cash or in-kind)
Carson River Trail System, Phase 2 – Ranch Connections				
	Southern Nevada Public Land Management Act	\$1,843,685	6/30/2022	\$50,000 (cash)
Hamm Property Acquisition				
	Land and Water Conservation Fund	\$250,000	9/30/2019	\$250,000 (cash)
Kings Canyon / Waterfall Trailhead				
	Federal Land Access Program (grant award to Public Works		7/30/2021	\$35,000 (cash)

Project Name / Area	Grantor	Grant Award	Period	Quality of Life-Open Space Contribution (cash or in-kind)
Kings Canyon Road (Dirt Road)				
	Nevada Off-Highway Vehicle Commission (NOHVC)	\$47,000 (to the U.S. Forest Service)	12/31/2019	TBD (\$10,000-\$20,000)
Noxious Weed Abatement				
	Carson Water Subconservancy District/ Nevada Department of Agriculture (Yellow Starthistle funds)	\$4,500	12/31/2018 COMPLETED	\$500 (in-kind)
	Carson Water Subconservancy District/ National Fish and Wildlife Foundation (NFWF)	\$10,200	12/31/19	\$0
	Carson Water Subconservancy District (annual funding)	\$15,000	6/30/2019	\$0
	Nevada Department of Agriculture	\$1,567	2/5/2018 COMPLETED	\$1,567 (in-kind)
Prison Hill Recreation Area, 5th Street Trailhead				
	Recreational Trails Program / Nevada State Parks and Federal Highways Administration	\$200,000	9/1/2020	\$51,141 (20% match – cash and in-kind)
Prison Hill Recreation Area, Motorized Area				
Phase 1	Nevada Off-Highway Vehicle Commission (NOHVC)	\$33,042 (to the National Off-Highway Vehicle Conservation Council)	12/31/2019 COMPLETED	\$2,171 (in-kind)
Phase 2	1) Nevada Off-Highway Vehicle Commission (NOHVC) 2) Recreational Trails Program (RTP)	1) \$100,000 2) \$100,000	12/31/2020	\$34,640 (cash and in-kind; can include \$19,381 for UTV and trailer purchase)

Volunteer Activities and Events

Summary: The Open Space Division proudly recognizes volunteer efforts provided by individuals and organizations. While this summary only recognizes those who have submitted official applications, have official agreements, and/or have participated in scheduled activities, the Open Space Division acknowledges and appreciates any and all who help to clean and maintain our precious lands.

Numerous organizations volunteered their time in 2018. Their efforts were mainly focused on trail construction and maintenance, trash clean-up, and river stewardship. Some of these organizations include: River Wranglers, Great Basin Institute, and Dutch Bros. Muscle-Powered continues to be a huge help in planning and maintaining trails throughout Carson City. Additionally, several student groups volunteered with us as well, including multiple Boy Scout troops, the Carson Senator's mountain bike team and the Carson High NJROTC. Working

with 189 cadets from the NJROTC, 420 lbs. of garbage were picked up from East Silver Saddle Ranch as part of the annual Carson River Clean-up Event.



Volunteers help clean-up East Silver Saddle Ranch on National Day of Service



NJROTC cadets search for trash and debris in the sagebrush

Residents played a big part in our volunteer program this year too. In the fall, individual volunteers removed 100 pounds of trash from East Silver Saddle Ranch and assisted with wrapping 30 cottonwood trees with chicken wire to protect the trees from beaver damage.

Last, but not certainly least, several individuals like Mr. Paul Sinnott and Ms. Robyn Orloff continue to steward the Prison Hill Recreation Area with trash clean-up and trail repair activities. The Friends of Silver Saddle Ranch continue to be very involved with management of lands along the Carson River, particularly the Silver Saddle Ranch.



Residents work to wrap cottonwoods at East Silver Saddle Ranch

Throughout 2018, the Open Space Program received an estimated value of \$113,475.24 from volunteers.

At minimum, volunteers spent 4,596 hours (a dramatic increase from the 1,805 hours volunteered in 2017!) on our lands, at a value of \$24.69/hour (the latest dollar value available, according to www.independentsector.org).

AmeriCorps Volunteers

- Joey Kelso, Natural Resource Management Intern worked with Open Space staff during the summer of 2018 and during his time with us he surveyed the entire Carson City owned river corridor for Russian Olive presence, and then wrote a management plan to address these infestations. Joey also completed a trail survey and collected responses from 35 individuals about trail conditions and user experience in Carson City. Lastly, he assisted with various noxious weed removal and maintenance projects.
- Chelsea Kincheloe, Volunteer Coordinator started in June as our first AmeriCorps VISTA in this position. She has been working extremely hard over the last eight months to build a Volunteer Program for the Department. She has worked with dozens of groups and individuals to complete a variety of projects from veteran cemetery maintenance to cottonwood wrapping with the public. One of Chelsea's biggest accomplishments' includes launching the Adopt-a-Trail Program in Carson City. She's already adopted out 8 trails to various groups who will be responsible for stewardship and maintenance of these trails.

- Kristin Simons, Marketing & Outreach Coordinator started in August. Kristin has been busy over the last six months continuing to make updates to the website. She has also been working to create video content highlighting special events, announcements and the Program of the Month. Additionally, she has been bolstering our social media presence and has greatly increased our social media following on several platforms.
- Kelsey Stalker, Community Education Coordinator started in August. Kelsey continues to create and lead numerous events - including many interpretive hikes and community workshops. She is also working to expand the Junior Ranger Program that was created last year. Kelsey hopes to make an interpretive map to couple with the Junior Ranger Program to help orient youth to the flora and fauna in Carson City Parks & Open Space. Additionally, Kelsey is working to create a pollinator garden in conjunction with the Greenhouse Project to be staged near the Foothill Trailhead.

Eagle Scout Project, Prison Hill 5th Street Viewpoint Trails

In conjunction with the Prison Hill Recreation Area 5th Street Trailhead Improvement and Trails Project, Eagle Scout Mr. Micah Woodruff of Troop #341 worked with his Troop to construct two new trail segments on the north end of Prison Hill. These trails lead to two beautiful vistas with newly installed benches overlooking the Carson River and Eagle Valley.

Eagle Scout Project, Foothill and V&T Trails

Eagle Scout Mr. Kincaid Peternell worked with his Troop to build two small bridges to facilitate ephemeral creek crossings on two recently constructed trails -- the Foothill Trail and the V&T Trail.

Boy Scout Project, Abandoned Mines

The Nevada Bureau of Minerals and the Boy Scouts worked to close two abandoned mines in the Prison Hill Recreation Area.

Activities and Events

In addition to volunteer efforts, the OSAC is very pleased to be engaged with various environmental education activities and other events throughout the year.

Carson River Workday

Every year, the Open Space Division works with River Wranglers to implement outdoor education lessons at Ambrose Carson River Natural Area. The project objective was to provide a natural resource lesson to high school students, allowing them to teach the same lesson to 4th graders. This year two workday events were held in October and focused on cottonwood and beaver ecology, featuring a cottonwood wrapping service project, as well as water quality education with River Wranglers.



Linda Conlin, former Executive Director of River Wranglers leads water quality education with the students.



Lyndsey Boyer, Sr. Natural resource Specialist assists students with wrapping a cottonwood with chicken wire.

Carson City Weed Coalition – Outreach

2018 was an extremely busy year for the Carson City Weed Coalition (CCWC) as we worked to increase our education and outreach program. The Coalition held eleven different community education events, and completed ten different media appearances including two features in the Nevada Appeal, an interview with KNVC Radio as well as creating an educational video series for social media. Marena Disbro, CCWC Coordinator also presented noxious weed information to the Board of Supervisors and as a part of the Carson Water Subconservancy District Get on the Bus Tour.

The busiest month for the CCWC was June as it was Invasive Species Awareness Month. This month was spent spreading information about the impacts of noxious and invasive weeds throughout Carson City. Events included a workshop at the Community Center focusing on invasive and noxious weed management strategies for homeowners, a “walk with the weeds” guided hike focusing on noxious and nuisance plant identification, as well as a “Bring Your Own Noxious Weed Event” partnering with Shoe Tree Brewing encouraging residents to bring noxious and nuisance weed specimens for help with identification and treatment advice.

Kids to Parks Day

In May, our Community Education Coordinator coordinated an extremely successful 1st Annual Kids to Parks Day, which was hosted at Silver Saddle Ranch. The day included a guided hike and mountain bike ride, environmental education booths as well as the first Junior Ranger Program event.



Both children and adults enjoyed a guided mountain bike ride down the Mexican Ditch Trail led by the Carson City Recreation Program.



Staff led a guided hike through Silver Saddle Ranch as a part of the new Carson City Junior Ranger Program.

National Trails Day

Forty-seven people volunteered for our National Trails Day event on June 2, 2018 to work on completing the Foothill Trail, including Mayor Crowell, Supervisor Karen Abowd, Director Jen Budge, Carson Tahoe Health COO Michelle Joy, Eagle Valley Children’s Home Executive Director Beverly Hennen, and volunteers from Muscle Powered, Great Basin Institute, Carson Tahoe Health, and Dutch Bros Coffee.



47 Volunteers from a variety of organizations help to complete the Foothill Trail

Silver Saddle Ranch

There were several events held in 2018, and with increased interest there is the potential for more events in the future.

- Friends of Silver Saddle Ranch: monthly board meetings, Hike/Bike meet-ups, Bird Walks, Star Gazing, Spring Open House and Christmas Open House
- Escape from Prison Hill half marathon and 10k running events
- Jazz and Beyond Music Festival
- Family Freedom Festival
- Interpretive events, Junior Naturalist/Carson Explorers, Kids to Parks Day
- Wedding

In 2018, the Jazz and Beyond Music Festival was held in August. Four bands played across two stages, with the main “stage” being a flatbed truck donated by Meeks Lumber and Hardware. Approximately 150-175 people visited the venue throughout the day. The Wild Ass Women were present with their adopted burros and two food trucks were on-site for attendees to purchase food and drinks.

Trail Design and Layout Workshop

Staff had the opportunity to attend a Trail Design and Layout workshop in September. The workshop was held at the new Walker River State Recreation Area in Yerington, NV. The workshop was led by professional trail builders from Alaska and the field and classroom lessons focused on the layout and design process for creating sustainable trail systems.



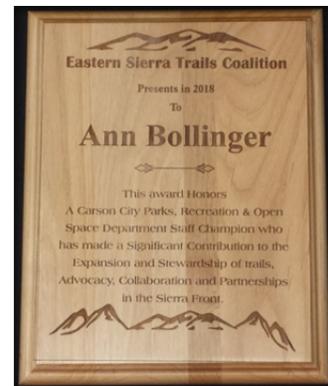
Open Space Maintenance Coordinator, Jared Whitaker (left) and Trails Coordinator, Gregg Berggren (right) pose for a photo during the Trail Design workshop.

Trail Summit

Carson City was host to the 2018 Eastern Sierra Trails Coalition Annual “Trails Summit”, which was held in November at the Western Nevada College, and attended by a record 115 people. Ann Bollinger received an Agency Award for her many years of trails advocacy.

Tours

- Carson River Watershed Forum
 - Hosted by the Carson Water Subconservancy District (CWSD) in April, the Forum covered topics relevant to the watershed including, riparian restoration, water quality and quantity, stormwater, flooding and floodplain management, invasive species, agriculture, recreation, and education/outreach programs. Ms. Boyer was a featured speaker, discussing yellow starthistle encroachment and management in Carson City.
- Get on the Bus
 - Each year, the CWSD conducts a two-day Carson River watershed tour from Alpine County down to the Stillwater Wildlife Refuge. The Open Space Program is a featured speaker to discuss the ballot initiative, land protection and land management along the Carson River.



Ann Bollinger received an Agency Award for her many years of trails advocacy

- River Rally
 - River Rally, hosted annually by River Network, is an international conference for river and water champions. Unique in its focus on providing practical education, inspiring courage, and celebrating achievements, River Rally brings together hundreds of people from across the United States and the world that care about rivers and water issues. This year, River Rally was hosted in Olympic Valley in late April.
 - In cooperation with CWSD staff, a successful float trip tour of the Carson River was led as a River Rally field trip. Participants from all over floated from Carson River Park to the Morgan Mill Road River Access Area, during which expert “tour guides” (Open Space staff and resource professionals from Carson City) discussed the Open Space program, acquisitions and floodplain protection, as well as the natural and cultural history of the river. The field trip concluded at River Fork Ranch in Carson Valley to learn about conservation efforts being applied there, as well as to learn about the Carson River Coalition and its history.



Staff completes ATV training at the Prison Hill Recreation Area

Throughout the year, Open Space staff also had the opportunity to attend several formal trainings, conferences and workshops, as well as hands-on equipment training from the Parks Division.

Capital Improvement Projects

Aquatic Trail Map

The Aquatic Trail Map update was a joint project with the Carson City Culture and Tourism Authority, Parks, Recreation & Open Space Department and Resource Concepts Inc., to develop a new Aquatic Trail Map. The new map shows the dramatic increase in Carson City managed river-corridor lands since the first edition. Also, the new edition includes natural, cultural and geologic history, which was not included in the old map. The published version of the map will be available for the 2019 boating season. To help promote the Aquatic Trail, the Carson City Culture and Tourism Authority did a film and photo shoot of a raft trip down the Carson River Canyon. This well-made, two-minute promotional video will be incorporated into promotional brochures.

Carson River Trail System, Phase 2 – Ranch Connections

The Open Space Program was awarded a \$1.8 million dollar grant through the Southern Nevada Public Land Management Act (SNPLMA). The grant funds will support several trail improvements on the Prison Hill Recreation Area, Mexican Ditch Trail, Silver Saddle Ranch, and the old Buzzy’s Ranch. In 2018, Open Space began the process of hiring a consultant to conduct the cultural review process, as well as consulting with Public Works and professional contractors to identify a safe crossing strategy from the Mexican Ditch Trail across Carson River Road. Staff also completed a draft Request for Qualifications (RFQ) for the trail design, construction drawings, and bid documents. It is anticipated that the RFQ will be advertised in January 2019.

Centennial Park Trails

Several trail projects have been completed in the area, including a 0.75 mile sustainable section of multi-use single-track trail named The Wild Horse Trail, which was completed with the help of Great Basin Institute and Muscle Powered.

Federal Lands Access Program (FLAP) Grant - Sierra Vista Lane and Trailhead Improvement Project

In 2017, Public Works was awarded funds from the Federal Lands Access Program (FLAP) grant to support the road reconstruction and repair of Sierra Vista Lane. A component of this grant was to improve access to public lands, so with this funding Public Works also designed trailhead improvements for the aquatic trailhead at East

Silver Saddle Ranch, as well as the equestrian and motorized trailhead that gains users access to the Pine Nut Mountains. These improvements were completed in October. Specific improvements to the trailheads include a new entrance road, creation of two new trailhead parking areas with split rail fencing, two new restroom shelters and solar lighting for safety. These repairs have greatly improved the overall image of East Silver Saddle, and we hope that these improvements in conjunction with our site development plan will vastly increase positive user experience at this site.

Foothill Trail

The Foothill Trail, which is located next to the Carson Tahoe Cancer Center on the Carson Tahoe Health campus, is a new 1.1 mile hiking/running/mountain biking trail connecting Carson City to Washoe County via Lakeview Estates. This new connection consists of two trails: the “Foothill Trail” and the “V&T Trail.”. The “V&T Trail” is a another small piece of what will ultimately be a much longer ‘Rail Trail’, proposed to follow the route of the historic V&T Railroad. This project demonstrates the value of partnerships as Carson City Parks, Recreation & Open Space partnered with Carson Tahoe Health, the Greenhouse Project, Eagle Valley Children’s Home, Nevada Department of Transportation, Muscle Powered, and others to complete many aspects of this trail from easements to construction.



Carson High School NJROTC showing off their bridge building skills (Foothill Trail)

This trail is being billed as a ‘Wellness Trail’. Studies indicate that time spent in nature can lower blood pressure, reduce stress and depression, improve creativity, and promote healing. A health care professional may even ‘prescribe’ walking, or just quiet emersion in nature, as part of a care plan.

Freeway Multi-use Path

In January, Public Works completed construction of the Freeway Multi-use Path from Highway 50 to Airport Road. Approximately ½-mile of the middle section was made possible through land acquisition by the Open Space Division.

Prison Hill Recreation Area, 5th Street Trailhead

The Nevada Division of State Parks Recreational Trails Program (RTP) awarded \$200,000 to Carson City for trailhead improvements at the corner of 5th Street and Carson River Road, as identified in the Unified Pathways Master Plan. In addition to trailhead improvements, the project will also focus on sustainable trail realignment and the rehabilitation of more than two acres of non-sustainable trails. In 2018, staff began working with Public Works to complete the design, bidding and construction management of the project. The project is estimated to be completed by spring 2019.

Secret Trail

This 1.3 mile re-alignment of an unsustainable use trail in Vicee Canyon was completed in May by Muscle Powered and will be utilized as part of the Carson City Off Road mountain bike race.

Silver Saddle Ranch - Stewardship Plan

Staff have been working with State Historic Preservation Office (SHPO) and an architectural historian to develop a baseline survey and monitoring protocol for the historic structures at Silver Saddle Ranch. In 2018, the architectural historian worked to obtain all necessary background documentation and conducted extensive surveys and research to complete baseline documentation of the historic structures. This information is being compiled into a report that also includes treatment and maintenance recommendations that will be incorporated as part of the stewardship plan. Once the report is complete, the SHPO will be able to move forward with creating an architectural stewardship and monitoring program for Carson City.

Trail Projects

Other trail projects are being planned for the Carson City area, including the Capital to Tahoe Trail and the Lincoln Bypass Trail which will link Carson City trail systems with trails in Tahoe; Centennial to Washoe Lake State Park, and a connection from Clear Creek to Kings Canyon.

Unified Pathways Master Plan (UPMP) Update

The updated UPMP, which incorporates the recommendations of the Eagle Valley Trail Committee in their comprehensive ‘Community Trail Inventory, Review, Evaluation, and User Needs Assessment Report’, was approved by the Board of Supervisors on March 15, 2018. The importance of this Master Plan update was demonstrated just days after approval when a private property owner approached the City with plans for building a home on his property high above the west side of town. The plan gave us a ‘place at the table’ to participate in discussions regarding a trail easement.

Land Acquisitions

2018 was an exciting year as we acquired a new property and made great strides towards future acquisitions!

Hamm Property

Staff is proud to announce the newest fee-title acquisition to the Open Space Program – 206 acres purchased from Gerald and Luanna Hamm. After unanimous approval and recommendation from the committee, the Board of Supervisors approved a grant application to the Land and Water Conservation Fund for fee-title acquisition of 206 acres between Ash Canyon and the Timberline Subdivision. Immediately following the Board of Supervisors, the potential acquisition began moving at an unusual fast pace due to a purchase offer being made. Nevada Land Trust was contacted to help facilitate the acquisition, including the appraisal and negotiations; and volunteers stepped forward to help with writing the grant application. In June, the appraisal was received and staff received notification that the project was awarded grant funding in the amount of \$250,000. The acquisition was the #1 ranked project by the selection committee.



*October 19, 2018: Celebration of Hamm property acquisition.
“SOLD to the residents and visitors of Carson City!”*

The acquisition was completed on October 5th and a public celebration was held on-site on October 19th. Several members of the OSAC, Board of Supervisors and Nevada Land Trust Board were present, as well as many local residents. The beautiful weather complemented the celebration. Staff would like to express our sincere appreciation with Nevada Land Trust who was able to expedite the process and complete the acquisition within a few months. Their dedicated effort prevented the sale of this property to a private party and, instead, protected “open space, scenic views, wildlife habitat and trails for the benefit of the public.”

As of December 2018, approximately 6,938 acres of land have been protected or obtained through purchases, donations, or transfers with a Quality of Life / Question 18 cost of \$10,713,812. Grants or other supplemental funding have provided \$8,856,757 for a total of cost of \$19,570,569.

Ash Canyon

As a result of the floods of 2017, Ash Canyon Road suffered significant damage from erosion and a portion of the road washed out, presenting significant safety concerns for motorized travel. As a result, the road was closed and a gate was installed that prohibited access to motorized users but allowed non-motorized users to continue using the road. Road grading and repair was completed in late fall 2017, but remaining repairs were postponed until 2018 due to weather. In June, the remaining flood repair work on the washout, flumes and landslides was completed in addition to the routine annual road maintenance. After the completion of the repairs, the road was determined safe for both motorized and non-motorized travel and the gate just above the Ash to Kings Trailhead was re-opened. Moving forward, the gate will remain open throughout the summer season, and will be closed again in the late fall as winter precipitation begins to prevent damage to the road caused by travel on wet soil conditions.

Carson City Weed Coalition – Treatments

Biocontrol Project

The Carson City Weed Coalition (CCWC), in coordination with the Nevada and Colorado Departments of Agriculture have been working on a biocontrol experiment examining the efficacy of a naturally occurring fungus, *Puccinia punctiformis* used to reduce Canada thistle populations along the Carson River. Two sites were selected for inoculation – Morgan Mill Preserve Open Space and Mexican Dam Open Space. At



Weed Coordinator, Maremma Disbro applies the fungus to Canada thistle

Morgan Mill Preserve Open Space and Mexican Dam Open Space. At both of these sites, baseline monitoring was conducted prior to inoculation with the fungus to estimate the cover of Canada thistle. Inoculation with the fungus was completed over the course of several days in September and October. The fungus is applied by sprinkling it on the rosettes of the Canada thistle.

If inoculation was successful, spores will be visible on the plants by next spring. The fungus is naturally co-occurring with Canada thistle, and will only impact the growth and reproductive ability of the Canada thistle, without harming other plants. If successful, reduction in the Canada thistle populations will be evident over the next several seasons. This fungus is one more tool in our Integrated Pest Management (IPM) toolbox, allowing us to treat noxious weeds without the use of chemicals.

Eurasian Watermilfoil Project

Eurasian Watermilfoil, a category A aquatic noxious weed was identified in the Mexican Ditch and Carson River in the summer of 2018. This plant was first observed in the Mexican Ditch in 2015 but the population remained small at that time. Since the floods of 2017, this plant has established a significant population in the Mexican Ditch. This plant is extremely aggressive and has the potential to negatively impact waterways by outcompeting important native riparian vegetation and clogging up culverts and irrigation structures. The Carson City Weed Coalition has been working with the Nevada Department of Agriculture, UNR's Global Water Center, Tahoe Resource Conservation District and



Large infestation of Eurasian Watermilfoil in the Mexican Ditch (July 2018)

professional consultants to develop a treatment plan for the removal of this plant. The treatment plan is based on protocol used to manage this plant in other ecosystems. Mechanical treatment (hand-removal) was completed in the fall with little success. Unfortunately the infestation is too large for hand-pulling to be efficient. Staff has explored all other options including dredging, herbicide treatment and cutting-edge Ultraviolet light-C (UVC) treatment, which all proved to be inappropriate for this system. Staff will continue to experiment and are looking at occultation using black plastic as a potential solution and will explore in the summer of 2019.

Carson River Canyon Open Space

As a result of the floods of 2017, Carson River Canyon Open Space was damaged from fallen rock on the roadway, as well as extensive erosion to the road which presented safety concerns for motorized travel. Staff worked with Public Works to identify a repair strategy for the washout along the road and repairs were completed in June. The road is now safe for motorized travel.



Lyndsey Boyer, Senior Natural Resource Specialist works to remove this plant by-hand

Increased staff presence in Carson River Canyon has reduced illegal activities such as dumping and camping. Additionally, in the past there were significant amounts of graffiti in various areas of the Canyon. Extensive graffiti abatement was conducted by painting over the graffiti with flat, earth-tone spray paint in an effort to “camouflage” the graffiti. More traditional methods for graffiti removal (i.e. harsh chemicals) aren’t appropriate for many of our open spaces so we have adopted this method and have found it both efficient and effective. The amount of existing graffiti has been greatly reduced and abatement will continue into 2019.

Lastly, in August a fire started at the Carson City Rifle & Pistol Range and burned into the canyon, scorching much of the slopes as well as down to the Carson River. In late December, staff completed revegetation activities in easily accessible areas in attempt to prevent establishment of cheatgrass and mitigate erosion and sediment entering the river. Due to the extent of the fire and the topography, staff is working to complete a large scale revegetation effort, working with a local helicopter company to complete the re-seeding in 2019.



Carson River Canyon after the Rifle Range Fire in August

East Silver Saddle Ranch

The Open Space Division worked with a consultant to complete a site development and management plan for the East Silver Saddle Ranch area. The primary goals for site improvements were to protect the resources, enhance accessibility, improve safety and develop educational/interpretive opportunities for visitors. An open house meeting with local residents was held at the Silver Saddle Ranch red house in conjunction with the development of this plan. Residents provided comments related to the site plan and other future improvements to the area. This plan is complementary to the road re-construction of Sierra Vista Lane which was completed in fall 2018, and will also fulfill recommendations and goals in the Carson River Management Plan.



Bollard installation using the Toolkat



Completed bollards preventing motorized access in the riparian area

After completion of the site development plan and the Sierra Vista Lane improvements, Open Space staff began implementing components of the plan immediately, focusing on travel management and restricting motorized access to the river using fencing and installing bollards. Additionally, a second parking area will be designated on the north end of the site by installing split rail fencing. Staff hopes to have the first round of improvements completed by spring 2019 with a goal to prevent all motorized access to the river in this area. After motorized access to the river is closed, staff will work to revegetate the disturbed areas and redundant roads.

Fuels Management with Sheep

Fuels management on acquired lands, as well as natural parks and the wildland-urban interface, is a top priority for the Open Space Division. Our well-received fine fuels management program through the use of sheep continued. The 13th consecutive year with targeted sheep grazing was conducted for 6 ½ weeks between April and May. One band was used to graze herbaceous fuels on less than 2,000 acres. The sheep are just one tool to help reduce the fire risk to our community. Residents are encouraged to utilize precautionary measures around their home as well. In addition to the targeted grazing project, staff led a “Trail Graze” Hike on the Lincoln Bypass Trail adjacent to where the sheep were grazing. This well attended event focused on teaching participants about the history of the sheep project in Carson City, the purpose and natural history of sheep and much more.



Sheep grazing in Kings Canyon

Horsecreek Ranch Thistle Dig

In June, staff was joined by Michael Fagen and Muscle Powered's Trash Mob (led by Donna Inversin and nine volunteers) on the second annual thistle dig. The group pulled and removed an astounding 20 bags of bull thistle.



Volunteers work to remove Bull Thistle from an invaded meadow in Horsecreek Ranch

Kings Canyon Road

Like many areas and roads around Carson City, Kings Canyon Road was extensively damaged during the 2017 floods. The U.S. Forest Service (USFS) administers most of the road; however, Carson City owns approximately two miles along the Horsecreek Ranch fee-title property acquisition. The Kings Canyon area is popular for numerous recreation activities such as hiking, mountain biking, equestrian, camping and motorized uses. Each year, unfortunately, there are a few vehicle accidents (rolling down the hillside) and several vehicles which get stuck in depressions due to unmaintained road conditions. Due to lack of federal funding for repair, Carson City worked with the U.S. Forest Service (USFS) on a grant application and the USFS was awarded \$47,000 from the Nevada Commission on Off-Highway Vehicles to fund the planning and cultural review process for repair of the road. Construction of the road repairs will not begin until this process is complete. A repair plan has not yet been completed because of delays in 2018 related to the potential historic nomination of Kings Canyon Road, USFS workload and the federal government shutdown but is anticipated to be complete early 2019. Carson City will apply for an additional Recreational Trails Program grant in order to fund implementation of repairs and hopes to complete this in 2019.

Mexican Dam – Safe Passage

Open Space staff are working to develop a plan to provide safe passage around the Mexican Dam for hikers, mountain bikers, runners, equestrians and boaters. This would enable a longer Aquatic Trail and provide connectivity for the Mexican Ditch trail to the south end of the Prison Hill Recreation Area. An engineering plan was developed for the design of an enhanced and safe passage around the dam for hikers, mountain bikers, runners, horse riders, and kayakers/canoers/rafters. Staff plan on submitting a grant proposal to fund this project in early 2019.

Old Buzzy's Ranch - Water Rights

When Carson City purchased the two properties (Anderson Ranch and Jarrard Ranch), collectively and commonly referred to as the old Buzzy's Ranch, there simply was not sufficient funding to purchase water rights. In both transactions, the owners kept the water rights. The terms stated that as long as water rights are applied to the land, the owners also reserve the exclusive rights for grazing. The Open Space Advisory Committee and the Board of Supervisors agreed to the terms and acknowledged that water will need to be acquired by some means at a later date.

Recently, Vidler Water Company purchased the water rights on the Jarrard Ranch. Through complex negotiations and transactions, Vidler agreed to a temporary water use back on the ranch. On behalf of Carson

City, consultants assisted with submitting water use permits with the Nevada Division of Water Resources. Upon receipt of the permit fees of \$5,673.00, the applications will be presented to the State Engineer for final review. In conjunction with this process, staff is working with consultants to create a Conservation Plan for old Buzzy's Ranch that addresses current irrigation practices and outlines a plan for the future to conserve the natural resources on the property under a reduced irrigation regime.

Planning ahead for the future, there are several grant funding sources which will help pay for water rights including, but not limited to, Ducks Unlimited, Trout Unlimited, and the Land and Water Conservation Fund.

Prison Hill Recreation Area

Non-motorized area:

Trails Coordinator Gregg Berggren has completed a draft comprehensive trail master plan for the entire Prison Hill Recreation Area and it is currently being reviewed for preliminary SHPO approval. The goals of this plan were to evaluate the trails on Prison Hill and establish a sustainable trail system through realignment and construction of new trails. The plan includes realigning the North Loop Trail, utilizing 16 miles of existing trail, 12 miles of new trail, and decommission of 3 miles of old roadbed. In addition to trail work, staff continued to repair broken sections of fence separating the motorized and non-motorized use areas in the Prison Hill Recreation Area, to prevent vehicle trespass into non-motorized areas.

Motorized area:

The south end of the Prison Hill Recreation Area comprises about 900 acres which are open to motorized vehicles. In response to previous recommendations in the Carson River Management Plan, the Open Space Division believes that a comprehensive strategy is needed to effectively manage this area. In 2017, staff began working with the National Off-Highway Vehicle Conservation Council (NOHVCC) on a phased, multi-year project to improve the recreational opportunities in this area while respecting local homeowners and protecting the natural resources for long-term sustainability. NOHVCC was awarded a grant from the Nevada Off-Highway Vehicle Commission to help fund this planning effort (Phase I). In 2018, through a process that included a comprehensive site assessment and various opportunities for public involvement, the team produced the Prison Hill Recreation Area OHV Management Plan that provides staff with a framework to proactively manage the this area. Through this process, the hope is to also develop partnerships with groups and organizations who can help with clean-ups, education, monitoring/patrolling, and be advocates for protecting the resources in this unique area. In fall 2018, two additional grant were received (one from the Nevada Off-Highway Vehicle Commission and the other from the Nevada Recreational Trails Program) to begin assessment, layout and design of the trails and trailhead; initial construction elements including the installation of boundary fencing; and education campaigns.

Russian Olive Mapping and Removal Management Plan

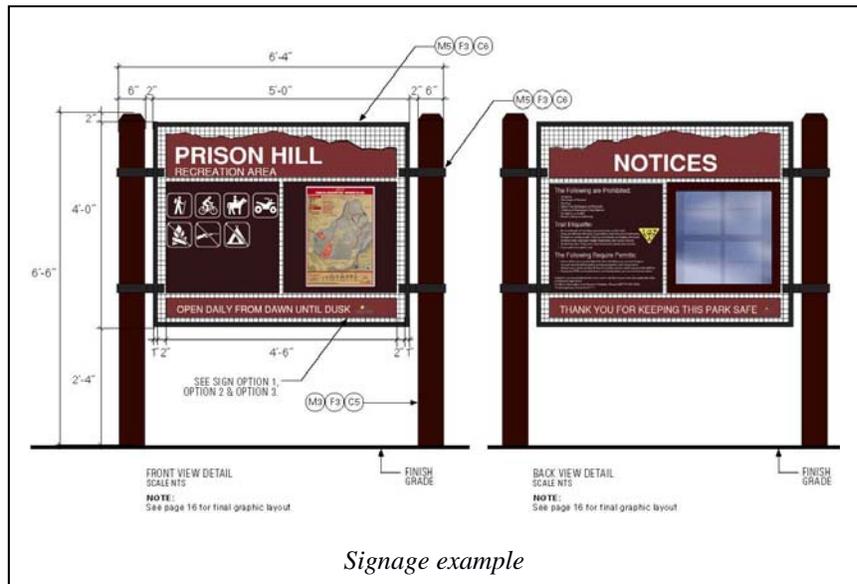
In summer 2018, Natural Resource Management Intern, Joey Kelso worked to survey and map Russian olive populations on all Carson City owned property in the Carson River corridor. After completing the survey, Joey worked to write a management plan for addressing the Russian olive infestation on the Carson River. His management plan included maps, removal and treatment protocol, restoration information as well as a property-specific evaluation of Russian olive density. Based on his findings, the Mexican Ditch Trail at Silver Saddle Ranch was identified as an initial treatment priority due to the abundance of trees present, many of which are juveniles, as well as the ease of access for treatment. Jared Whitaker will begin Russian olive removal this winter, starting with highest priority areas and moving to less densely populated properties. Treatment strategies include physical removal with an herbicide treatment, or girdling the tree and applying herbicide, depending on ease of access for removal.



*Joey Kelso,
Natural Resource Management Intern*

Signage Master Plan

A Signage Master Plan for the Parks, Recreation and Open Space Department was completed. The Master Plan is a guide for all exterior signs in the City's system of parks, trails, recreation centers and natural areas. The Master Plan includes graphic design standards for the variety of sign types necessary for the various conditions found throughout the City. Signs located at, or on public outdoor facilities perform the integral function of connecting a site and its visitors. They can identify, direct and interpret features within a park, open space or along a trail and provide the users with a sense of knowledge and safety. Signs also identify the location as a Carson City site, which evokes images of Carson's rich history, well-maintained facilities, and excellent outdoor recreation. The first ten trailhead kiosk sign frames were ordered, and content and artwork for sign panels are being developed. Additionally, staff is working to retrofit existing Monument Signs based on the specifications in the Signage Master Plan.



Silver Saddle Ranch

Jared Whitaker has been diligently working on maintenance projects and improvements around Silver Saddle Ranch. Some activities include: weed abatement, beaver activity management on the Mexican Ditch, and vegetation management such as working to clear the travel corridor along roads and trails. Additionally, he has been working extensively on improvements to the Open Space Maintenance Shop. He has increased our tool inventory, created a secure storage area and constructed work benches and other necessary items in order to be able to build and fabricate signs, fencing and other projects. The shop is now fully functional and has greatly increased our maintenance efficiency.

Poo Poo Project: Teton Raptor Center, this program aims to prevent avian death by covering vents on vault toilets. A staff member from the BLM made us aware of this project, and subsequently vents were installed on both vault toilets at Silver Saddle Ranch. More information on this project can be found here:

<http://tetonraptorcenter.org/our-work/poo-poo-project/>

Waterfall Trail

Historically, there was a significant amount of graffiti present on the rocks near the Waterfall. Jared Whitaker has worked diligently over the past months to cover the graffiti which is now almost complete. Moving forward staff will be able to respond to new graffiti and work immediately to cover it. Additionally, a mutt-mitt station was installed at the trailhead to reduce dog litter on the trail. Lastly, the Waterfall Trail continues to have issues with trail users cutting the switchbacks and creating social trails. Staff worked to vertical mulch over these areas with native, natural materials found on-site to prevent additional social trail creation.

On behalf of our Committee and staff, thank you very much for the opportunity to present this report.