



STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
NEVADA DIVISION OF FORESTRY
2478 Fairview Drive
Carson City, Nevada 89701
Phone (775) 684-2500 Fax (775) 684-2570

MINUTES

Workshop to Solicit Comments on Proposed Regulations to NAC 527

Monday, July 20, 2020 at 10:00am

Pursuant to Governor Sisolak's March 22, 2020, Declaration of Emergency Directive 006, Directive 018 (5/7/2020), Directive 021 (5/28/2020), the requirement contained in NRS 241.023(1)(b) that there be a physical location designated for meetings of public bodies where members of the public are permitted to attend and participate is suspended in order to mitigate the possible exposure or transmission of COVID-19 (Corona Virus).

****Virtual Meeting Only****

Attend virtually: Join the meeting (video and audio): <https://call.lifesizecloud.com/4236997>

Call in by phone (audio only): +1 (877) 422-8614, Meeting extension: 4236997#

In advance of the Public Workshop the Division is asking that anyone who plans to attend the public workshop to please fill out the digital sign-in sheet and indicate how you intend to participate and if you intend to provide public comment.

****The digital sign-in sheet is accessible at:****

<https://forms.office.com/Pages/ResponsePage.aspx?id=5kCj5J64aE6OqhVE0nA5gD16ZODVbaFHguekc6p9acZUOE9PTFQwV1g5SjZUVExENFRYT11JV11TQi4u>

1. OPEN WORKSHOP, INTRODUCTION

Call to Order – Nevada Division of Forestry, State Forester/Firewarden, Kacey KC, calls meeting to order at 10:00am

The introduction of NDF staff was presented by Kacey KC

- Kacey KC, State Forester/Firewarden, Nevada Division of Forestry
- John Christopherson, Deputy Administrator, Nevada Division of Forestry
- Jerry Adkins, IT Professional, Nevada Division of Forestry
- John Christopherson opens the meeting and describes the intent of the proposed regulation changes. These changes would be the addition of Tiehm Buckwheat to the State list of fully protected species. Results of these regulations would require permits and regulations by NDF that provide protective measure for this plant.

2. PUBLIC COMMENT

Persons making comment will be asked to begin by stating and spelling their name for the record. All public comments should be as brief and concise as possible so that all who wish to speak may do so (3 minutes for individuals and 5 minutes for group representatives). Comment will not be restricted based on viewpoint.

- Rachel Martin – Professor of Chemistry, University of California Irvine; **in favor of listing**
- Gabriel di Chiara – private citizen; **in favor of listing**
- Wendy Stolyarov – 12-year Nevada resident and activist; **in favor of listing**
- Kevin Emmerich – co-founder of Nevada non-profit, Basin Number Range Watch; **in favor of listing**
- Rose Strickland – private citizen; **in favor of listing**
- David Van Seger – Reno, NV resident speaking on behalf of the Toiyabe Chapter of the Sierra Club; **in favor of listing**
- Evan Myer – private citizen; **in favor of listing**
- Dexter Lim – Organizer with Sunrise Movement Las Vegas Hub; **in favor of listing**
- Matt Candeias – Ecologist, Conservationist; **in favor of listing**
- Ian Bigley – Progressive Leadership Alliance of Nevada; **in favor of listing**
- Samantha Seabrook-Sturgis – private citizen, Master’s Degree in Plant Science, Works as a botanist analyzing plants for projects on public lands in the Great Basin; **in favor of listing**
- Carolyn Mills – private citizen, botanist in the Mohave desert; **in favor of listing**
- Dr. James Blaire – Professor in the Department of Geography and Anthropology at Cal-Poly Camona; **in favor of listing**
- Christina Tarr – private citizen, Librarian at University of California, amateur naturalist; **in favor of listing**
- Lori Ann Burd – private citizen, Senior Trainee & Environment Health Director at Center for Biological Diversity; **in favor of listing**
- Frank Landis – private citizen, trained botanist, Conservation Chair for the San Diego Chapter for California Native Plant Society; **in favor of listing**
- Joshua Der, PhD – Professor of Biology at California State University Fullerton; **in favor of listing**
- Serena Hertzog – private citizen, member of the Sunrise Movement, Environmental Science Student; **in favor of listing**
- Emily Schumacher – private citizen, Master’s Degree in Science; **in favor of listing**
- Elle Kramer – private citizen, botanist in the Great Basin in southern Idaho; **in favor of listing**
- Jackie Chiakulas – private citizen; **in favor of listing**
- Kyle Davis – Nevada Conservation League; **in favor of listing**
- Johnathan Price – consultant to Ioneer, Nevada State Geologist, former Director of Nevada Bureau of Mines in Geology for research and public service at the University of Nevada Reno; **in oppose of listing – also submitted written comment**
- Daniel Patterson – Ecologist in Boulder City Nevada, retired from BLM; **in favor of listing**

3. PRESENTATION FROM THE DIVISION OF NATURAL HERITAGE ON THE STATUS OF TIEHM BUCKWHEAT

Jim Morefield, Supervisory Botanist

Questions:

- Drew Kaiser: Has there been any demographic data run on Tiehm buckwheat? Any population analysis?
- John Christopherson: Of the seed viability of 16%, was that from seed collected from plants or seed that had been harvested out of a soil seedbank.
Jim believes it was from seed collected from that year's crop on the plants.

4. REVIEW AND DISCUSSION OF ADDING TIEHM BUCKWHEAT TO THE STATE LIST OF FULLY PROTECTED SPECIES OF NATIVE FLORA PUSUANT TO NAC 527.010.

Patrick Donnelly, Center for Biological Diversity (Presentation attached)

No Questions

Dr. Naomi Fraga (Presentation attached)

- Kacey KC: When you say the exploration activity that has already taken place has caused an increase in the invasive species. Is there any data on that? Have there been studies done on what has come in and where it's come into prior to their exploration?

Dr. Fraga said that she sees this as a deficiency in Ioneer's buckwheat protection plan.

They do not identify invasive species as a threat. They don't have anything that would cover invasive species. Dr. Fraga offered to provide observational data from being to the site prior to the exploratory mining roads. Kacey asked for some of the data to be provided in written comment.

- John Christopherson: You noted population 6 as being the most viable population. What did you mean by that, and how was it determined?

Dr. Fraga said based on surveys in 2019 it is the most abundant population in terms of number of individuals. From there they conclude it is also the population that provides the most seed based on total number of individuals.

Kris Kyper, EM Strategies, Biology Program Manager, EM Strategies (Presentation attached)

- Michelle Tucker: Heard earlier from CBD that 16% germination, but what germination do you or UNR have? Kris said the 16% was the seed test done by the Nevada Department of Agriculture with populated plates at the green house and germination rate was between 27-30%. Survival rate at the site in transplant pots was 72% two months after planting. Michelle Tucker: It was her understanding that the soil preference studies at UNR grew best in an unexpected soil type. Can you help me understand that? Kris stated the soil type that was fairly low in boron and matched the soil plants were grown in population 6 since that's where the plants grew the best. Seemed like the plants started to grow in the greenhouse with soils without boron. One of the transplant sites was in one of the greenhouse soils and did well in the field too.
- Samantha Seabrook: Was wondering if they've looked into other long-term studies of similar species and why this would be more successful than others in the past? Why isn't this specific species already growing in this suitable habitat, miles away? What are you doing to enter the long-term effect of this program? Kris said they have identified seemingly suitable areas for the project area, but it isn't there. They are going to start some seeding these sites and see if the species grows. Project success would be based on germination, establishment, grossing seed.

- Ruth Carraher: Geologist that has spent a lot of time mapping the project. Seems that buckwheat really likes to grow in the 1920s mining disturbance and the 1980s expiration disturbance. Do you have any percentages of what is growing in these disturbed areas vs what is growing in the undisturbed areas? Kris said they do not have any actual data, just observational data. And all the sites where there have been soil pits, the buckwheat have colonized those trenches. About 80% of them across all sites it has colonized disturbance.
- Naomi Fraga: In the buckwheat protection plan, did see any information on detailed methodology on seed collection was made or stored on maternal lines. Is there any knowledge about the buckwehats propagated as to how many maternal individuals they are descended from? Kris said other people conducted these studies. They collected from each site. Are they tracked? Kris does not know. Is there mineral composition on silt vs sand? Yes, they were, the soil samples were submitted with water holding capacity. Will get that information to the group.
- Dexter Lim: How is this method of preservation justified given the apparent lack of foresight around the apparent area? This flower seems very particular about where it grows. How does climate change alter and effect the conditions of the growth of this plant? Has this been factored in? Kris said they don't really have any predictions. At the request of the BLM they are going to install a climate weather station and could correlate that with any translations from the sites.

Bernard Rowe, President, Ioneer (Presentation attached)

- Kevin Emmerich: You say this mine won't use a massive amount of water, but the BLM told him this will require 3500 acres of water/year. The residents of Fish Lake Valley may think this is a lot. Bernard disagree the number is correct, it will take 3500 acres if water, which is equivalent of two ranches in Fish Lake Valley that are irrigating for alfalfa. Although that may seem like a lot, it in fact is not much water that will be taken from residents or farms of Fish Lake Valley.
- Emily Forscher: The previous presenter described the reality that this buckwheat doesn't occur in other areas considered in its natural habitat is a mystery. Do you have any insight in this mystery? No, there are similar rocks and soil types within 10-15 miles of this area and Ioneer botanist have looked at these sites but haven't found them. Why, he is not certain. At the Rhyolite project site plants occur where there is disturbance.
- Kevin Bell: How does the process and plan of the mine adapt and change over it's time that impacts the plant? First, it's avoidance. Then we'd also need to identify expansion to the South not to disturb these populations.
- Matt Berger: Since there seems to be areas within the perimeter around the buckwheat, is there not lithium & boron in the patches around the existing population? Some do have lithium boron, and some don't – it's a combination of both anywhere between 5 – 20 miles away.
- Ben Grady: There has been discussion on removing/relocating plants from populations 4-5-6, how many years will those be monitored before mining takes place in stage 1? Bernard said they will be monitored during stage 1 mining. This would happen 2-3 years prior to mining.
- Lee Davis: Do you have an initial understanding of the metapopulations? *** Kris said they are having work done from University of Alabama Huntsville, they are looking at genetic variation within and among. That is work that doesn't have any results yet. Tissue samples have just been collected for research last week. Stay tuned for those results.

- Ian Bigley: Question regarding the claim that the mine's use of water isn't significant and being compared to ranches. He understands that the water used in Fish Lake Valley exceeds the perennial yield at the current time. How can we characterize this as not a significant use of water in the context of the water already being over allocated? Bernard said any use of water is significant. He was just stating the quantity of 3500acre-feet relative to other uses is not significant.
- ***Samantha Seabrook: BLM regulations of special status plants seem weak legally. Mining projects often violate those stipulations with no repercussions.
- Dr. Naomi Fraga: Bernard, are you aware of any other similar projects that will have a significant impact on the rare plant population where the translocation or removing these plants from their current location and transplanting, seeding, etc where the reintroduction project was successful? What metric are you trying for success? Bernard said he will need to refer the first part of the question to Kris, as she is familiar with previous programs and projects within the state. There is monitoring of current projects every 3-5 years for at least 20 years. Characteristics to be measured are size, flower production, seed output and viability. Other successful projects – Michelle Tucker. Michelle has worked as a consultant for Ioneer and they have tasked her to look at other examples and successes to learn as much as we could. The two projects that stand out are with Ioneer and the Sawtooth National Forest. They were geothermal and it was hard to find examples. Orton botanical garden is a successful example. Springs Preserve, they have successfully grown Las Vegas buckwheat and also from seed and able to sell the seed for commercial harvest. Bernard said for Ioneer the goal for success is maintaining and increasing the plant population in the Rhyolite Ridge. We intend to do the work required to ensure the population increases, not decreases.
- Evan Myer: Why will Ioneer take the stance that germinating seeds will turn into a new population that was translocated? He has done this for a long time and germinating seeds is easy to do, getting the plants successfully established to form a new population is very difficult to do. With the type of plant and area you're looking at, why would you take a huge leap of imagination that this would create a new population of this plant. Bernard said seed germination is just one step of the process. Kris responded to Evan that they don't know this is going to work, but they are going to try. Growing from seed onsite would be an easier way of establishment, but it will take many years of monitoring.

5. PUBLIC COMMENT

Persons making comment will be asked to begin by stating and spelling their name for the record. All public comments should be as brief and concise as possible so that all who wish to speak may do so (3 minutes for individuals and 5 minutes for group representatives). Comment will not be restricted based on viewpoint.

- Michelle Tucker – Botanist and Environmental Scientist with Newfields;
- Travis Columbus – Research Scientist at California Botanic Garden; **in favor of listing**
- Lara Kobelt – Botanist in Southern Nevada, representing self; **in favor of listing**
- Allen Biaggi – Nevada Mining Association; **Small Business Impact Statement has been posted**
- Emily Forscher – representing self; **in favor of listing**
- Ruth Carreher – Geologist, representing self; **is opposed to listing**
- Kevin Bell – Attorney at Public Employees for Environmental Responsibility.

- Ainslee Archibald – Sunrise Movement LV Hub; **in favor of listing**
- Cecelia Gonzalez – Native Nevadan; **in favor of listing**
- Bernard Rowe – President of Ioneer; **is opposed to listing**
- Ben Grady – Assistant Professor of Biology at Ribbon College, President of Erigonum Society; **in favor of listing**
- John Hadder – Director of Great Basin Research Watch; **in favor of listing**
- Kevin Emmerich – co-founder of Nevada non-profit, Basin Number Range Watch; **in favor of listing**
- Kimberly Schaefer – Degree from Cal Poly in Botany; **in favor of listing**
- Ian Bigley – Progressive Alliance Leadership of Nevada; **in favor of listing**

6. ADJOURNEMNT

State Forester/Firewarden KC Adjourns the meeting. Announcement of the date for one more workshop is shared – July 28, 2020 Small Business Impact

We are pleased to make reasonable accommodations for individuals with disabilities who wish to attend the meeting. If special accommodations or assistance at the meeting are requested, please notify our office by writing to the Nevada Division of Forestry, 2478 Fairview Drive, Carson City, NV 89701; or by calling 775-684-2500 no later than two (2) working days prior to the scheduled meeting. You can also email John Christopherson at jchrist@forestry.nv.gov.

A copy of all materials relating to the proposal may be obtained online or by contacting Nevada Division of Forestry, 2478 Fairview Drive, Carson City, NV 89701.

Notice of this meeting is posted in the following locations:

Nevada Division of Forestry website at <http://forestry.nv.gov>
 Nevada State Legislature website at www.leg.state.nv.us/App/Notice/A/
 Nevada Public Notice website at <http://notice.nv.gov>