

EXHIBIT 32

To

PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

In

Western Watersheds Project, et al. v. U.S. Dept. of the Interior, et al.

Case No.: 3:21-cv-0103-MMD-CLB

Declaration of Terry Crawford

1
2 I, Terry Cawforth, hereby declare as follows:

- 3 1. I am a resident of Kings River Valley, Humboldt County, Nevada. The statements below
4 are based upon my 42 years working for the Nevada Department of Wildlife (NDOW),
5 including 6+ years as agency Director, as well as my personal knowledge and experience
6 concerning the Thacker Pass Mine Project and 35+ years working and recreating in the
7 Montana Mountains of Humboldt County.

8 **Education and Experience**

- 9 2. I was born in Ely, Nevada and graduated from the University of Nevada, Reno with a
10 Bachelor of Science degree and several graduate study credits in Wildlife Management. I
11 have attended, organized and taught numerous continuing education seminars and training
12 sessions to enhance my knowledge of wildlife management techniques and associated
13 skills including: Peace Officer Standards and Training, administrative processes,
14 collaborative and facilitated management, public outreach and workshops for a number of
15 species such Greater sage-grouse, mule deer, desert tortoise, bighorn sheep, etc.
- 16 3. I grew up in the copper mining/milling towns of McGill and Weed Heights, Nevada
17 where I first learned of chemical processing of ore. Both of these mines are now closed,
18 and one is a “ghost town” with little or no reclamation and both are considered Superfund
19 sites with environmental impacts that persist to this day. Despite these factors, I believe
20 in harvesting natural resources and am not opposed to mining if done under modern day
21 protocols and regulations.
- 22 4. I worked for the Nevada Department of Wildlife for 42 years, beginning at the Verdi Fish
23 Hatchery near Reno, which was focused on captive rearing of Lahontan cutthroat trout to
24 reestablish a population at Pyramid Lake. I subsequently worked at the Spring Creek
25 Trout Rearing Station near Baker and as a Game Warden and Biologist in Douglas,
26 Carson, Lyon, Mineral, Storey and Washoe counties while stationed in Gardnerville. I
27 then moved into positions of supervisory authority, serving as game warden supervisor
28

1 for Elko, Eureka, Lander, and White Pine Counties while assigned to Elko. My next
2 assignments were in Reno as statewide Law Enforcement Division Chief and Deputy
3 Director before accepting a Governor's appointment to the Directors position. This
4 statewide work gave me significant experience in legislative, regulatory, and public
5 process' as well as an enhanced general knowledge of wildlife management for the
6 myriad of Nevada's species and their required habitats.
7

- 8 5. I served as Director of NDOW for 6+ years, before retiring in 2006. During my career
9 with NDOW I served as an active member and often as chairman, secretary or president
10 of numerous commissions, committees, and councils including: Western Association of
11 Fish and Wildlife Agencies and the International Association of Fish and Wildlife
12 agencies, both of which included North American states and provinces; Colorado Fish
13 and Wildlife Council; Pacific Waterfowl Flyway Council; Nevada State Environmental
14 Commission; Douglas County, Nevada Planning Commission; and the Nevada Wildlife
15 Commission. These appointments included considerable travel throughout North
16 America, testimony before legislative bodies, including the United States Congress,
17 Nevada Legislature, state and local commissions, and Federal, state and local courts. In
18 addition, considerable time was spent working with congressional delegations and local
19 government on wilderness designations, wetlands, grazing, and funding for wildlife and
20 habitat management and protection.
21
- 22 6. During my tenure as Director we reorganized the department to increase efficiency and
23 acquired additional funding sources to provide more training and improved equipment for
24 employees, acquired a wildlife veterinarian on staff, improved public and industry out
25 each, and created new divisions to better address non-hunted/fished for species and
26 address land and water use issues related to all wildlife. We increased the transplanting
27 and water development programs for a number of species to expand their range with
28 considerable assistance from volunteer organizations. We also initiated several species-

1 specific task groups to study and recommend actions to preserve and enhance populations
2 of those species and their habitats. Our work was successful as we became more involved
3 in land and water decision processes, industries, non-profit organizations, and the media.
4 Lahontan Cutthroat Trout range was expanded, Governor Guinn's state sage-grouse plan
5 prevented the endangered species listing of the sage-grouse and increased awareness of
6 sagebrush habitats, a network of over one thousand rainwater catchments were installed
7 or improved that improved wildlife distribution and population size for a number of
8 species, and successful protection strategies were developed for desert tortoise. During
9 my tenure as Director, no species was ever listed as endangered or threatened.

10
11 7. Nevada experienced a significant increase in mining in the 1980's, especially for gold in
12 the northern counties. Recognizing the potential impacts to wildlife and required habitats,
13 NDOW became very collaboratively involved with mining companies, agricultural
14 entities, local government, state permitting and federal NEPA processes to identify
15 potential threats to wildlife habitat and opportunities to diminish impacts and actually
16 enhance habitats. Some examples and techniques used were: toxic pond impoundment
17 protection for migrating waterfowl; reseeded areas of disturbance and harvesting seed
18 from them for future projects; mitigation funding for offsite habitat improvements;
19 wildlife water and wetlands developments; scientific studies; redesign of facility plans
20 prior to construction including roads and fencing which did not interfere with migration
21 corridors; minimizing ambient light, dust and noise; and special land designations such as
22 population management units, mineral withdrawals, and areas of critical environmental
23 concern (ACEC).

24
25 8. I had long been concerned for the status and trend of sage-grouse populations and their
26 sagebrush habitats and what impact an Endangered Species Act listing would have on
27 Nevada's rural culture and economy. Recognizing that sage-grouse are a keystone species
28 for sagebrush communities, we established a sage-grouse conservation team with

1 representatives from academia, legislators, environmental community, mining,
2 agriculture, hunters, scientists, federal and state land management agencies, wildlife
3 commission, utility companies, and NDOW employees to provide group support. After a
4 year plus of meetings, guest speakers, observers, and tours, a statewide conservation plan
5 was completed and work began. We were successful in using several techniques and
6 processes to implement some of our proposed projects and were asked by other western
7 states to “export” our process to their states through the new formed Western Association
8 Sage Grouse team in order to create a rangewide effort. One project initiated was the
9 Lone Willow Population Management Unit capture, marking and bird health study. This
10 study indicated the sage grouse population estimate for the Montana Mountains area at
11 approximately 10,000 birds (attached). That estimate is now 5000 or less based on
12 LEK (Swedish word for gathering place) count analysis.
13

14 **Personal Knowledge of the Thacker Pass Project**

- 15 9. I have worked and recreated in the Kings River Valley area for 35 years and became a
16 permanent resident almost 3 years ago. I am now the closest active residence (4 miles) to
17 Thacker Pass. Of the 4 mountain ranges that surround me the Montana Mountains are of
18 most interest and therefore where I spend the most time. Almost the entire west flank of
19 the range can be seen from my home and I can be found on the front porch with a cup of
20 coffee watching the sun rise or in the evening with my favorite beverage enjoying the
21 sunset. The Montana's are a very unique environment found nowhere else in Nevada,
22 thanks to their formation by the McDermitt Caldera whose "hot spot" now resides under
23 Yellowstone. The vistas are amazing, as is the variety and seasonal migrations of
24 wildlife. From some points one can see 25 different mountain ranges, it is easy to see
25 over 3 dozen species of wildflowers in the spring, and a short morning drive will reveal at
26 least 2 dozen species of wildlife to the trained eye. I hunt and camp in the area, regularly
27 take friends on tours, especially in March and April to view sage grouse “lekking” on the
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1 Montana-10 lek and wildflowers and would wager that there are few who know the entire
2 range as well as I.

3
4 10. I have been involved with the Bureau of Land Management BLM NEPA/EIS process
5 surrounding the Thacker Pass Project, including attending public meetings. During
6 public meetings BLM employees and LNC-contracted biologists, geologists, chemists,
7 etc., and drafters of the EIS presented renditions of the site and their findings which again
8 showed expanded growth and complexity of the project and drastically understated the
9 potential environmental, cultural and infrastructure impacts.

10 11. At the meetings, I was particularly interested in wildlife information presented by Dr.
11 Clark of UNR that she had been walking transects at the site for 10 years and found no
12 evidence there been a sage grouse on the site in that period of time. I stated that I had
13 read a similar quote from LNC CEO Zawadzki and asserted that this information was
14 inaccurate, to which Dr. Clark responded with a lecture about sage grouse and that I as an
15 individual was obviously unschooled about sage grouse. I asserted that I had been
16 hunting in the area the day before the meeting and, as always at that time of the year I and
17 fellow hunters had seen a good number of sage grouse and questioned that if there were
18 no sage grouse in the area, why had fence reflectors been placed around the site in an
19 effort to prevent sage grouse from flying into the fence. At this point, BLM employee
20 Ken Loda interjected that my information was "merely anecdotal" and moved the
21 meeting on to other topics.

22
23 12. At the final public meeting in Orovada prior to the decision on the EIS the drafters
24 presented their findings and answered questions from a sparse crowd. As time drew on
25 Ken Loda attempted to close the meeting, saying that it was only scheduled to last 30
26 minutes and that it had now exceeded 45 minutes. The audience asked for more time and
27 Mr. Loda's response was that he was bound by the 1872 mining law and the recent
28 presidential proclamation on strategic minerals and that he had to "get this project done,

1 approved, and off his desk.” At this point he was told that he was subjecting BLM to
2 litigation for such a statement. His reply was that he “did not want to hear that” and he
3 left for Winnemucca.
4

5 13. As stated earlier, I have been involved in numerous NEPA processes and this one is by
6 far the worst managed one I have seen.

7 14. Following the BLM release of the EIS and ROD Orovada area citizens were confounded
8 about ways to proceed to address a multitude of concerns about mine impacts on the
9 communities. We had weekly meetings with presentations from every possible source
10 and opinion and created the Thacker Pass Concerned Citizens (TPCC) group, which
11 appointed me as chairman. I have since stepped down from that role, although I remain
12 involved to assist my fellow local residents.

13 **Wildlife Use of the Project Area**

14 15. Based upon my knowledge of wildlife in the Thacker Pass area as a citizen, as well as
15 my familiarity with wildlife populations in Nevada generally, the Thacker Pass Lithium
16 Mine will have serious impacts to wildlife.

17 16. I do not consider myself as an expert for any specific species of wildlife but believe that I
18 have developed considerable knowledge regarding a broad array of wildlife through
19 education, field work and experience, and constant training and study. This, I believe is
20 especially true for species such as sage grouse, mule deer, and cutthroat trout. I have been
21 instrumental in developing and participating in task groups regarding the status and future
22 of species such as sage grouse, mule deer, cutthroat trout, bighorn sheep, pronghorn,
23 desert tortoise and their required habitats.

24 17. Specific to the Montana Mountains I am very familiar with the habitats seasonally
25 occupied, migration routes, population trends, NDOW species management and BLM
26 grazing strategies, and required habitat condition.
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- 1
2 18. Winter range is the most critical for wildlife and is usually where the highest mortality
3 occurs, especially for young of the year, when forage and thermal cover may be minimal.
4 For example, sage grouse, mule deer, pronghorn antelope, and big horn sheep typically
5 follow this same pattern and return to the same familiar areas annually unless weather
6 and forage conditions dictate minor adjustments. The NDOW numbered management
7 units are developed to coincide with these documented migrations and to allow for
8 measurement and estimation of species population status within each unit.
- 9 19. Most resident wildlife occupy higher elevations in the summer and move south to lower
10 elevation areas for the winter and return north in the spring as weather and forage
11 conditions allow. These migrations may be as much as 20 miles each way and may
12 include moving to adjacent mountain ranges, local agricultural lands and even north into
13 Oregon.

14 **Sage-Grouse**

- 15 20. Specific to sage-grouse, the Lone Willow Population Management Unit (PMU), which
16 for the most part coincides with NDOW unit 031, and is so named because of a large
17 meadow complex in the center of the Montana Mountains was established as a result of
18 an intensive several year study, including trapping, banding and attaching telemetry
19 devices, and health checks of birds at lek sites and either documenting movement and
20 nest success electronically or by comparing the number of banded birds versus un-
21 banded birds in the fall hunting harvest. This analysis indicated that the estimated sage-
22 grouse in the Lone Willow PMU, which includes 4 mountain ranges and 2 valleys, was
23 20,000 birds, which meant that as much as 20 percent of the world's sage-grouse resided
24 in the Lone Willow PMU.
- 25 21. The only population measurement available now is spring lek counts and harvest reports
26 including wing samples from birds harvested in the fall. The population estimate from
27 these sources has now fallen to approximately 5000 birds and corresponds with similar
28

1 reductions in other states for a variety of reasons, such as ambient noise and heavy
2 vehicle traffic during lek season near mineral and oil extraction and geothermal sites.

3
4 22. The most significant villain in sage-grouse population decline is the rangewide loss of
5 millions of acres of sagebrush ecosystems. Such is the case for the Lone Willow PMU
6 where the Holloway fire caused the loss of over 800,000 acres of sagebrush ecosystem in
7 3 mountain ranges that to this date show little sign of recovery. NDOW closed the sage
8 grouse hunting season in unit 031, which caused the loss of data collection except lek
9 counts. BLM has tried developing fire breaks which result in more noxious weeds,
10 reseeding at the wrong time of the year which is, of course, unsuccessful, and placing
11 reflectors on fences to prevent bird strikes in areas.

12 23. I am personally aware that sage-grouse use the Project area for habitat, especially in
13 winter. I have seen sage-grouse in the Project area, particularly in the fall and winter,
14 when I hunt chukar in the area. It is not uncommon for me to see flocks of as many as 30
15 sage-grouse and I frequently find more sage-grouse than chukar.

16 24. I also annually take friends to the Montana-10 lek in March and April to see the lekking
17 spectacle and report my observations to the NDOW area biologist. Montana-10 is one of
18 the three largest leks in the Lone Willow PMU and is nearly in eye sight and certainly
19 within ear shot of the Thacker Pass Project. It is considered a trend lek because of a long
20 recorded history and is a significant contributor to the overall sage grouse population of
21 the Lone Willow PMU. I have observed, and NDOW has records, of nesting birds and
22 fall coveys immediately above the project and I annually see large coveys of wintering
23 sage grouse on the Project site, often near the small pit in the middle of the Project area.
24 It must be assumed significant mortality of these birds will occur due to noise pollution,
25 traffic and outright removal of the sagebrush community.

26
27 25. I have a basic knowledge of sage-grouse biology. Disturbance to sage-grouse from noise
28 impacts can interfere with lekking, when noise interference may prevent hens from

1 locating dominant males. However, that habitat used for nesting or brood-rearing may be
2 close to a road or other noise source does not mean it will not be used by sage-grouse.
3 Sage-grouse hens typically nest within about 4-miles of the lek where they bred. As long
4 as noise does not interfere with the lek site, the habitat is still likely to be used by sage-
5 grouse.
6

7 26. This is especially true because sage-grouse have high site-fidelity and will return to the
8 same habitats they have seasonally used historically, even after those habitats have been
9 degraded. When sage-grouse use degraded habitats it decreases their chances of
10 successful breeding and survival.

11 27. Sage-grouse can also make large seasonal movements. For instance, I am aware of an
12 example of a sage-grouse hen that bred on a lek in the Montana Mountains, went to
13 Oregon to rear her chicks, and returned the next year to breed on the same lek.

14 28. During different times of the year, sage-grouse rely on different habitat components.
15 However, sage-grouse rely on sagebrush for every part of their lifecycle. In winter, tall
16 sagebrush that sticks up above the snow is important for the birds, which eat the leaves
17 and use the plants for thermal cover.

18 **Harms From The Thacker Pass Project**

19 29. The mine will begin by stripping away all of the vegetation in the area. This will
20 completely remove the last, large scale, unburned south facing sagebrush ecosystem on
21 the entirety of the Montana Mountains. This is critical winter range for a wide array of
22 wildlife, who after having migrated several miles over several weeks will have to move
23 to less suitable, previously burned, and often north facing snow filled habitats by crossing
24 a state highway. This will surely exacerbate the already dwindling area populations of
25 sage grouse, mule deer and pronghorn antelope.
26

27 30. By destroying or degrading habitat at Thacker Pass, the Thacker Pass Project will remove
28 the last good winter range in the whole mountain range, pushing wildlife south to the

1 Double H mountains south of the Project area.

2
3 31. The Double H mountains will not be equally good winter range because the slope there is
4 north-facing and full of snow in the winter. Most of the habitat there has burned. Deep
5 snow and burned habitat create substandard conditions for wildlife. Animals need the
6 sagebrush community at Thacker Pass for cover and food in the winter and if they don't
7 have that there will be significant wildlife mortality; lack of cover increases vulnerability
8 to predators, etc.

9 32. The removal of the habitat at Thacker Pass is an immediate impact from the mine that
10 will not be recoverable in our lifetimes. Sagebrush is notoriously difficult to restore and
11 takes decades to reach a condition where it could serve as habitat, particularly sage-
12 grouse winter habitat. Adverse effects from the mine will destroy the value of habitat at
13 Thacker Pass for generations of sage-grouse, which, given the birds' site-fidelity, will be
14 a virtually permanent effect.

15 33. I also understand that in late July, LNC and/or BLM plan to begin ground disturbance at
16 the Project area for cultural surveys that involve digging up to 525 4 and a half foot deep
17 holes and 60-120 foot long trenches 9 feet deep or more at 7 locations. These actions will
18 remove sagebrush that cannot be restored in our lifetimes and create a weed vector at
19 each disturbed location. Even if LNC and/or BLM reseed the areas, they will not be able
20 to re-create the quality of habitat removed. In my experience such efforts are rarely
21 successful at establishing sagebrush, and even if successful, sagebrush takes decades to
22 reach a state in which it could serve as good sage-grouse winter habitat. In addition, I am
23 skeptical that LNC will want to restore the area when it plans to strip away all surface
24 vegetation as soon as it begins mine construction.

25
26 34. If LNC and/or the BLM initiate ground work now, there is a reasonable concern that
27 heavy equipment and human traffic will spark a fire in the current extremely dry
28 conditions. The potential for a fire to use time of year prevailing winds, cheatgrass, and a

probable lack of sufficient firefighting staff and equipment to sweep across the site and burn the entire east flank of the range is high. Such an event would leave wildlife arriving at winter range in dire straits and cause significant losses. Fire season in this area has now expanded to June through October.

I swear under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed this 30th day of June at Kings River, Nevada.

s/ Terry Crawford