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November 24, 2004

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Subject:

September 2004 Draft Environmental Impact Statement Castle Peak and Eightmile Flat Oil and Gas Expansion Project Inland Resources, Inc. (DEIS)

Dear Mr. Stringer:

These comments are responsive to the above DEIS.

The Utah Native Plant Society is a 501(c)(3) non-profit corporation that has since 1978 been an advocate for the appreciation, preservation, conservation and responsible use of the native plant and plant communities found in the state of Utah. UNPS has members throughout the state of Utah including the Vernal area.

THE DEIS MAKES AN ASSESSMENT OF THE IMPACTS ON RARE CACTI IMPOSSIBLE

The document throughout confuses two separate and distinct species of Sclerocacti making it impossible to determine which cactus species is being referred to and assessed. It on the one hand inappropriately lumps in some sections *Sclerocactus brevispinus* Heil & Porter (Pariette or Shortspine fishhook cactus) with *Sclerocactus glaucus* (K. Schumann) L. Benson (Uinta hookless cactus) and seemingly refers to both as "Uinta hookless cactus" and yet in other sections segregates them.

The DEIS therefore as proposed cannot currently be properly evaluated inasmuch as it is defective with its respect to its analysis of threatened, endangered and sensitive plant species; further insufficient information is contained in the DEIS nor is a biological assessment available to properly assess the potential impacts of the proposal. Accordingly, the project should be extended and/or delayed until such time as adequate information is available; or in the alternative, the "no action" alternative adopted.

SCLEROCACTUS BREVISPINUS IS A SEPARATE TAXONOMIC ENTITY

Sclerocactus glaucus was federally listed as threatened in October of 1979. A recovery plan for the species was completed in September of 1990. That plan indicated that there were three important populations of *S. glaucus* in the Uinta Basin one of which was "a small population of a morphologically distinct form growing on the clay badlands in the Pariette Draw drainage south of Myton, Utah" (p. 3). Each main population group was recommended for formal protection providing for undisturbed habitat (p. 12). Page 19 of the USFWS recovery plan stated that morphological and other research would be done to:

> …determine the taxonomic status of obvious morphologically distinct populations currently considered to be *S. glaucus* with particular emphasis on the short spined phase from the Pariette Draw drainage in Utah. **If appropriate, protection under the Act will be provided to those entities which are demonstrated to be separate taxa**." (emphasis added)

In 1994, a separate taxon relating to the short spined cactus was named, *Sclerocactus brevispinus* (the specific epithet in fact referring to that particular characteristic). And later research and studies were conducted as recommended in the recovery plan (by Heil, Porter and others) which in fact indicate that *S. brevispinus* is a separate entity distinct from *S. glaucus*.

The Flora of North America currently also recognizes *Sclerocactus brevispinus*. (It also considers *S. glaucus* to only occur in Colorado and instead identifies *S.*

wetlandicus as the species that occurs in Utah with distinctive features and having geographical barriers; this means that all of these Sclerocacti are rarer than previously thought and management/impacts of what is referred to as *S. glaucus* in the DEIS has not taken that into account).

Cactus expert Dorde Wright-Woodruff concurs with the Flora of North America treatment (personal communication, 11/22/2004). She has in fact for several decades indicated that there are multiple species in this area and that there are multiple distinguishing charactertistics particularly in connection with flowers (size, fragrance, color, etc.), buds, spines, size and habit (personal communication, 1/12/1984).

Welsh et al. in the latest *A Utah Flora* (2003) while not recognizing it under the name above in fact recognizes the Shortspine cactus as *Sclerocactus whipplei* var. *ilseae* and the Uinta hookless cactus as *S. whipplei* var. *glaucus* (reverting to a 1987 treatment). Through Dr. Welsh's own experimentation he has further concluded the same thing as observation and genetic studies have: that these are different taxonomic entities, both of which are narrowly restricted rare endemics.

Both the Utah Rare Plant Guide (www.utahrareplants.org) hosted by the Utah Native Plant Society and the Utah Natural Heritage Program consider *S. brevispinus* as a valid and separate taxonomic entity. The Utah BLM treats it as a separate species.

Further studies will no doubt further help to clarify the complex relationship of these Sclerocacti but all recognized experts we are aware of appear to agree that these are different taxonomic entities and unless the BLM has evidence to the contrary, they must be treated as such.

Even the Fish & Wildlife Service has recognized as recently as 1999 (Seq #1644, RIN: 1018-AF15) that *S. brevispinus*, previously included in *S. glaucus*, needed a change in taxonomy and was included in a proposal to list as endangered or threatened. *S. brevispinus* was not originally included as a part of *S. glaucus* because it was viewed as the same thing; rather it was included because it was previously undescribed: "Because *S. brevispinus* was part of *S. glaucus* when the latter species was listed as threatened, those plants now referred to as *S. brevispinus* are still considered to be listed as threatened." (See 62 Fed. Reg. 49401 Sept. 19, 1997). This was not a statement that they were one and the same thing at all, nor an indication that there was even a taxonomic issue. Unfortunately the Service has not followed up and published the required notice.

The affect of combining both species in the DEIS analysis is particularly egregious because the primary impact of this DEIS appears to be on *S. brevispinus* habitat.

The BLM must treat *S. brevispinus* as a separate taxon deserving of separate management and other action. Impacts must be assessed separately to avoid its extirpation.

Examples of improper combining of two species in the DEIS:

Surveys discussed in the DEIS sometimes only refer to Uinta hookless cactus, for example see page 2-23 (see section 2.4.4.4).

In the table on page 3.7-2 (and on the page prior) where the two separate species are actually mentioned, *Sclerocactus brevispinus* is indicated in the discussion of *S. glaucus* and is referred to as a "form of *S. glaucus*."

Reference to "takes" of cacti are made. To which species are these referring to?

At page 4-1.27 the DEIS indicates that based on documents dated in 1995 and 1996 that *S. brevispinus* should be included as a portion of the species *S. glaucus*. The 1995 and 1996 information was not only likely inaccurate then but it is clearly now showing that *S. brevispinus* should NOT be included in *S. glaucus*.

The impact assessment for *S. brevispinus* on pages 4.2.22 is improperly included in the *S. glaucus* assessment. The BLM preferred Alternative A impact assessment fails to consider *S. brevispinus* at all. The conclusion in Alternative A indicates that the potential impact is similar to the proposed action indicating that perhaps only 1% of the total population may be impacted is flawed in many respects, particularly because, again, the DEIS improperly combines two separate species in making this analysis.

SCLEROCACTUS BREVISPINUS IS A FEDERALLY LISTED SPECIES

S. brevispinus while considered by the BLM as a sensitive species and while it is a separate and distinct species, it is a protected species under the Endangered Species Act pursuant to the US Fish & Wildlife Service, i.e. the FWS considers the *S. glaucus* listing to ALSO cover *S. brevispinus*. So the analysis of impacts to it must be considered as they would for any federally listed species in addition to any other BLM guidelines that apply.

INADEQUATE RECENT SURVEY INFORMATION

The DEIS admits to already significant impact to occupied and potentially unsuitable habitat (page 2-43) and without any breakdown as to each species, almost as if this is an acceptable loss (it is not). Significant people-caused impacts as identified in the 1990 recovery plan had already occurred by that time. It is clear that there is really no information available to indicate to what the

cumulative losses to the species have already been. The two species are being managed in a piecemeal fashion.

Surveys have not been recently conducted in connection with *S. brevispinus* apparently since the late 90's. Essential monitoring information is therefore unavailable making the ability to render an informed decision impossible. Plants in previously established plots have apparently all perished.

SHORTSPINE FISHHOOK CACTUS HABITAT SHOULD NOT BE DISTURBED

The DEIS acknowledges that the proposed project area involves over 50% of the known habitat of *S. brevispinus*. Yet these impacts have not been considered o the basis of that taxon as a separate entity. Why segregrate the habitat of *S. brevispinus* on the one hand but yet consider impacts as if it is a part of *S. glaucus*?

Removal or disturbing any *S. brevispinus* habitat is not acceptable as an appropriate mitigation activity in view of the very likely severe decline of this species. There is evidence to suggest that the population size of this species of some 3700 or so plants in the mid-80's has dramatically declined due to drought and other unknown conditions; the species has not been properly managed to anticipate and avoid other impacts such as the project being proposed.

Further as a percentage of the total number of proposed wells in Alternative A, a relatively small number could significantly abate sensitive species plant habitat disturbances (for both cacti species). For example, a reduction of 10-15% of the total number of wells in the areas just outside of the riparian setback zone would substantially reduce or perhaps eliminate sensitive plant species impact yet that alternative has not been proposed. This does not seem to be an unreasonable alternative in light of the huge number of wells (over 900) that have been proposed.

MITIGATION MEASURES ARE NOT ACHIEVABLE AS PROPOSED

Transplantation has not been a commonly accepted procedure for offsetting an adverse impact to *S. glaucus* historically (Larry England, personal communication, 12/9/1983) nor to any of Utah's threatened, endangered or sensitive cacti.

With respect to the transplantation program on page 4.3-13 of the DEIS, there is little evidence to suggest that a transplantation program such as that proposed will be successful nor appropriate. Evidence instead suggests that these cacti are generally difficult to transplant and grow outside of their native ecosystems. *S. brevispinus* in particular is adapted to "clay badlands" (which may be unique to Sclerocacti and which reinforces the argument that it is a different taxon that has

evolved to require a specific soil type) and would likely not thrive outside of its specific soil requirements. The same is also very likely true of *S. glaucus*.

Mitigation on page 4.3-18 indicating that Inland will somehow salvage cacti and its seed bank is a completely nonsensical and impossible proposition. This would be like asking members of UNPS to operate oil rigs: we would not have the knowledge nor skill nor inclination to do so. This puts the two species further at risk and especially since collection of the species is one of the key threats; collection could suddenly become an "open season" proposition creating further unnecessary losses. Further Inland employees will not be able to discern the difference between the various species of Sclerocacti in the area, will not be able to recognize whether there may be seed in the soil (in places where plants may have perished due to drought or other causes), what habitat might be suitable, nor how to properly remove nor keep plants alive. If there were to be any removal of cacti at all (and there should be none) it would need to be done by competent professionals and further the objective should likely be to relocate the plants to other nearby or adjoining possibly previously disturbed or other logical native habitat. The conclusion reached on page 4.3-19 that transplantation would/could in any way preserve the cactus seed bank is exceedingly unlikely: if the plants live at all, they would likely perish before producing seed and/or would not produce seed in the absence of its pollinators. It also contains the erroneous inclusion of both species as if they were one.

UTAH BLM NEPA PROCEDURES HAVE NOT BEEN FOLLOWED

The Utah BLM NEPA handbook outlines procedures to be followed for sensitive plant species. *Sclerocactus brevispinus* is currently listed as a BLM sensitive species. The procedures outlined in the NEPA handbook have not been followed for this species.

POLLINATOR NEST LOCATIONS NOT CONSIDERED

The DEIS makes no assessment with respect to damage to pollinator nesting sites which are not even identified. Critical pollinators may exist on the very lands that are being proposed to be further disturbed. Oil pads and roads may not form barriers to pollinators per se but land disturbance may destroy pollinator habitat. As the study indicates, the pollinators are likely wide-ranging. They likely do not live where the rare plants live. How will their habitat then be protected if it is not known where they live? Dust from truck and other increased traffic in the months of April and May might also interfere with pollination if buffer zones are not placed between roads and rare plants.

SEED BANKS NOT PROPERLY CONSIDERED

Mitigation makes no provision for seed banks in areas where rare plants may not actually be currently found. The seeds could be long lived and critical for the

future survival of the species, especially in light of recent drought conditions The DEIS has seemingly ignored decade long, severe climatic changes in assessing impacts in general.

SURVEY METHODOLOGY NOT APPROPRIATE

Page 2-23 suggests that some surveying might be done by methods other than "on foot." These are species that often withdraw into the ground and can be difficult to spot even when standing right over them. What survey methods are being proposed?

PARIETTE WETLANDS WETLANDS ACEC DOES NOT ADEQUTELY PROTECT SCLEROCACTUS BREVISPINUS

A map that clearly outlines where the ACEC boundaries are in relationship to the proposed developments needs to be provided however it appears that only the first seven miles of the easternmost area potentially occupied by *S. brevispinus* are included in the ACEC.

The extreme western portion of Pariette Draw represents the most clearly distinctive and unique specimens of *S. brevispinus*. Yet the ACEC does not protect it at this location as far as we can tell. An RNA should be immediately established to protect the western half or portion.

Surface-disturbing activities on special status plant species habitat within the ACEC is indicated as non-allowable (page 3-22 in Chapter 3 – ACEC management Prescriptions).

There is no analysis presented in the DEIS of the potential habitat loss in terms of potentially suitable habitat as well as occupied habitat for either or both of the two rare cacti species.

IMPACT OF INCREASED UNAUTHORIZED OHV USE NOT ANALYZED

The DEIS acknowledges as an advantage to the public that the construction of additional roads will lead to an increase in OHV road access. It does not consider however that with that additional access, additional unauthorized OHV by less responsible OHV users will occur and this then represents a negative impact to rare plant and other vegetation.

BALANCING MULTIPLE USES AND IMPACTS ON NATIVE VEGETATION

The amount of impact to native vegetation and ecosystems potentially caused by this project is disturbing. These are fragile, arid lands which as the study properly notes, will have a hard time recovering from impact (revegetation of pads may take 50 years or more; cryptobiotic soils may take 250 years to recover

as per the DEIS). Glancing at the provided maps gives one the impression that the area is being primarily managed for oil and gas and related uses. There are however many competing and appropriate uses of these lands, not the least of which is for recreation and education. Healthy native vegetation/ecosystems goes hand in hand with scenic beauty and therefore to value (both economic and other). A landscape dotted with oil rigs and wells and the roads that will be required to get to the pads and all of the additional traffic are very much in conflict with recreational and other uses. The area needs fewer, not more, roads. The Pariette Wetlands is highly publicized as a destination spot on Utah tourism, agency and recreation sites. Yet it would appear that highly significant activity will occur along Pariette Road under the BLM's preferred alternative (see 1-9 of the DEIS). This will decrease the desirability of the area.

The experience of recreational visitors to the area will likely be seriously undermined by the level of proposed activity and there is a real lost value that has not been calculated. Uses of the area might include sightseeing, hiking, botanizing, birding, butterflying, research/education/field trips, rock hounding, mountain biking and off-road vehicle use (as long as these activities are responsible and observe BLM rules/regulations and riders use existing trails, we recognize these as appropriate public uses) and many others. All of these uses will be seriously compromised if the balance shifts too far towards oil and gas or other development use. Users traveling to the Pariette Wetlands along the Pariette Road should not be visually confronted with any more land disturbances and additional non-recreational traffic than is absolutely necessary. These impacts have not been given sufficient consideration in the DEIS. Recent years of drought likely make range and other lands even more vulnerable to human impacts that ever before and there is no indication that has been taken into account in determining allowable impacts.

CONCLUSION

As previously indicated above, the "no action" alternative must be adopted absent updated and accurate biologic information. All habitat (potential/historical/occupied) for *Sclerocactus brevispinus* should be immediately protected and either the existing ACEC extended to include all of it or an RNA designated for the unprotected portion and no disturbance to its habitat should be allowed in the interim. A comprehensive survey should be completed by next April/May 2005 like the one the BLM conducted in 1985 to arrive at some idea of current occupied habitat; monitoring needs to begin anew and an annual spring/fall monitoring program needs to be established at various sites to be determined within Pariette Draw and perhaps elsewhere, the spring monitoring to include pollinator research. Management plans for the ACEC need to be finalized and put into place before the approval of any further projects in the area and consideration should be given to fencing *S. brevispinus* habitat to protect unauthorized access, OHV threats, etc. Use of the area proposed by the project in general should be more balanced towards recreational and scenic values and

fragile ecosystems in general require protection. Section 7 consultation with the US Fish & Wildlife Service also needs to be re-initiated.

Sincerely,

Utah Native Plant Society

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