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December 22, 2010

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Dear Messrs. Schafer, Tidwell, Newman, Upchurch, Salazar, Gould, Tuggle, Spangle, and Shelton,

RE: Notice of Intent to Sue the U.S. Department of Agriculture (USDA) and the U.S. Forest Service (USFS) for failing to reinitiate Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (USFWS) regarding (1) the Mount Graham telescope project and its resulting jeopardy to the endangered Mount Graham Red Squirrel, and (2) regarding destruction of Critical Habitat.

SUMMARY OF LEGAL VIOLATIONS

On behalf of the Center for Biological Diversity, Maricopa Audubon Society, and the Mount Graham Coalition, I hereby provide notice, pursuant to 16 U.S.C. § 1540(g)(2), that USDA and USFS are in violation of the ESA for failing to reinitiate formal consultation under

section 7 of the ESA, *16 U.S.C. § 1536*, for the Mount Graham telescope project. The telescope project is permitted by USFS in consultation by USFWS.

The Mount Graham telescope project has exceeded the allocated size and extent considered in its applicable July 14, 1988, USFWS Biological Opinion. The project is no longer exempt from ESA review as previously provided by earlier legislation.

The University of Arizona ("UA"), as owner and operator of the Mount Graham International Observatory, is in violation of section 9 of the ESA, 16 U.S.C. § 1538(a)(1)(B), because it is reasonably certain that unauthorized taking of endangered Mount Graham red squirrels has occurred and will continue to occur as a direct result of (1) the university's unlawful expansion of the observatory project to more than 40% larger than statutorily allowed and (2) as the result of the university's unlawful expansion beyond that previously considered by USFWS through formal consultation.

Section 7(a)(2) of the ESA requires "[e]ach federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded or carried out by such agency… is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat." 16 U.S.C. § 1536(a)(2).

Following formal consultation, the USFWS must issue a "biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.14(g)(4); 16 U.S.C. § 1536(b).

When a jeopardy a determination is made, the USFWS "shall suggest those reasonable and prudent alternatives which it believes would not violate [section 7(a)(2)] of the ESA" and which can be taken by the Federal agency or applicant in implementing the agency action. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)(5). Reinitiation of formal consultation is required and "shall be requested by the Federal agency or by the Service where discretionary Federal involvement . . . has been retained or is authorized by law" and if, among other reasons, "new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered" or "the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion." 50 C.F.R. § 402.16.

For the Mount Graham telescope project, USDA and USFS initiated formal consultation with USFWS in 1987. This consultation culminated in a July 14, 1988, Biological Opinion.

In that Opinion, USFWS explained that jeopardy to the Mount Graham Red Squirrel could only be avoided by implementing Reasonable and Prudent Alternative 3 (RPA3) which would limit the observatory project to a maximum of 8.6 acres. USDA and USFS then concluded their National Environmental Policy Act (NEPA) compliance based on the 8.6-acre restriction, and accepted the acreage limitation as an express condition on the observatory project. The 8.6-acre limitation was also expressly incorporated into the Arizona-Idaho Conservation Act (AICA), whereby section 602(a) exempted the project from further "requirements of section 7 or the Endangered Species Act. . . [s]ubject to the terms and conditions of Reasonable and Prudent Alternative Three." AICA § 602.

The 1988 Biological Opinion only considered the wildlife and other cumulative impacts of an observatory project spanning 8.6 acres. AICA's prospective section 7 exemption only applies if the project satisfies AICA's 8.6-acre limitation.

The telescope project has grossly exceeded the 8.6-acre allotment by more than 40%, as described in the following section. Because this expansion and its consequent impacts to the highly imperiled Mount Graham Red Squirrel have never been evaluated by USFWS, the failure of USDA and USFS to reinitiate consultation directly violates section 7 of the ESA. Because this "new information" – a significant expansion of the project – has not been "previously considered" by USFWS in its 1988 Opinion or elsewhere, and because the original action (an 8.6-acre project) has been "subsequently modified in a manner that causes an effect" on squirrels and their critical habitat, USDA and USFS are in violation of section 7 of the ESA and can only remedy that violation by immediately reinitiating formal consultation with USFWS.

In addition, because the University has only obtained incidental take authorization from USFWS pursuant to the 1988 Biological Opinion based on an 8.6-acre project, it is reasonably certain that the University's substantially expanded project is now resulting in far more incidental take than authorized by USFWS's 1988 Opinion. That Opinion only authorized up to six takes per year, including deaths, harm, wounds, and harassment. By increasing the project size dramatically in designated red squirrel critical habitat – a violation of the plain terms of AICA – the University has engaged in activities that have taken, and will continue to take, red squirrels without USFWS authorization and without coverage under AICA. As such, the University is in patent violation of section 9 of the ESA, and can only remedy that violation by obtaining authorization from the USFWS through section 7 or section 10 of the ESA.

The Center for Biological Diversity, Maricopa Audubon Society and the Mount Graham Coalition hereby provide you notice, pursuant to 16 U.S.C. § 1540(g)(2), that you are in violation of the Endangered Species Act for failing to re-initiate formal consultation regarding the increasingly deadly effects of the continued presence of telescopes and other structures on the severely endangered Mount Graham Red Squirrel and its Critical Habitat. In 60 days, on February 22, 2011, if you have still not reinitiated formal consultation, we will seek judicial relief.

Eric Glitzenstein, Esq. and William Eubanks, Esq. from Meyer, Glitzenstein & Crystal, of Washington, DC will be representing us in this matter. Erik Ryberg, Esq., of Tucson, AZ, will be our local counsel.

SUMMARY

The Mount Graham Red Squirrel (*Tamiasciurus hudsonicus grahamensis*) is one of the rarest and most imperiled animals on Earth. Only about 200 survive. Piecemeal loss of its habitat continues to be the greatest threat to the squirrel.

The last evaluation of the Mount Graham telescope project resulted in the July 14, 1988, Biological Opinion. Since then, piecemeal loss of the squirrel's habitat has increased dramatically. Habitat destruction associated with the telescope project and habitat destruction by firefighting efforts protecting telescopes, independent of firefighting efforts protecting forest and endangered squirrel, have been particularly damaging.

Spruce-fir forest habitat, in particular, is critical for red squirrel survival. Since the last evaluation of the telescope project in 1988, destruction and fragmentation of spruce-fir forest habitat has been catastrophic. Consequently, jeopardy to the squirrel has increased dramatically.

The University of Arizona and its partners are responsible in large part for most of the latest and the worst destruction of the spruce-fir forest habitat. Given the well recognized and predictable fire and pest history on Mount Graham, these actions are certainly the only controllable variable of habitat destruction. (*Dynamics of the Spruce-Fir Forests on the Pinaleno Mountains, Graham County, Arizona*, Julie C. Stromberg and Duncan T. Patten, The Southwestern Naturalist, 36(1):37-48, March 1991. *Fire History in the Pinaleno Mountains of Southeastern Arizona: Effects of Human - Related Disturbances*, Henri D. Grissino-Mayer, Christopher H. Baisan and Thomas W. Sweetnam, USDA Forest Service General Technical Report RM-GTR-264:399-407,1995.)

UA is supported by its partners, including the Vatican, Arcetri Observatory, Max Planck Institute, Ohio State University, University of Virginia, Notre Dame University, University of Minnesota, Research Corporation, Arizona State University, and Northern Arizona University. Partners share responsibility and culpability for driving the Mount Graham Red Squirrel closer to extinction.

Since 1988, reevaluation of the destructive effects of the telescope project has been precluded by UA astronomers' two past successful legislative exemption efforts. These efforts resulted in the November 18, 1988, Arizona-Idaho Conservation Act (AICA) (Pubic Law No. 100-696, 102 Stat. 4597.) and the April 25, 1996, AICA-modification rider in the Omnibus Consolidated Rescissions and Appropriations Act of 1996 (Public Law No. 104-134, 110 Stat. 1321.).

Reasonable and Prudent Alternative Three (RPA3) of the July 14, 1998, Biological Opinion for the effects of the telescope project on the Mount Graham Red Squirrel is incorporated into AICA. RPA3 provides that, among other limitations,

> "[a] total of 8.6 acres would be committed to the Observatory…"

As long as the astronomers do not exceed 8.6 total impacted acres, no reevaluation can take place.

The Forest Service and the University agree:

> "We are well aware, as is the University of Arizona, that the presently approved acreage is all that can be accommodated in the biological opinion and the law. Consequently any request for additional acreage now or in the future could not be approved without addressing both the opinion and the law."
>
> (*Correspondence, from USFS Coronado NF Supervisor Jim Abbott, to USFWS Arizona State Supervisor Sam Spiller, RE: additional acreage needs on Mount Graham*, September 5, 1989.)

USFWS agrees:

> "…any future requests for acreage beyond the 8.6 will almost certainly require reinitiation of consultation."
>
> (*Correspondence, from USFWS Regional Director Michael Spear, to USFS Regional Forester David Jolly, RE: Withdrawal of the request for additional acreage for road widening and viewpath clearing may be inappropriate as documentation exists to show both proposals may be needed*, September 19, 1989.)

The Court agrees:

> "Congress need not have incorporated into the statute the terms of Alternative Three, which expressly provide that the management plan should 'govern the construction and operation of the astrophysical complex and the associated road systems in ways least likely to adversely affect the squirrel...."'
>
> (*ORDER, Mt. Graham Red Squirrel, et al., Plaintiffs, v. Mike Espy*, Secretary of Agriculture, et al., Defendants, 986 F.2d 1568, March 3, 1993.)

In 1994, the Court confirmed the need for project reevaluation if the total of 8.6 impacted acres of RPA3 were exceeded. The Court observed:

> "…defendants' [USFS', USFWS' and the University of Arizona's] concession that if the project were revised to exceed 8.6 acres or to be inconsistent with some other central feature of RPA 3, then formal consultation culminating in a biological opinion by the FWS would be required."
>
> (*Court's Findings of Fact and Conclusions of Law and Order, Mount Graham Coalition, et al., Plaintiffs, v. Jack Ward Thomas, et al., Defendants*, CIV 94-437 TUC ACM; July 28, 1994.)

The Court based its observation, in good part, on the fact that the University of Arizona had earlier, unsuccessfully attempted to convince the Court that reevaluation of their project was not necessary before their 1993, surreptitious and illegal change of location of the Columbus or large binocular telescope (LBT) to East Emerald Peak. At the time, the University stated that,

> "…the only specifications provided by RPA 3 and AICA for the LBT site are that…the entire telescope project must include no more than 8.6 acres within a 24-acre area…"
>
> (*Defendant's and Intervenor's Proposed Findings of Fact and Conclusions of Law, Attorneys for Intervenor State of Arizona Board of Regents and U.S. Department of Justice, Mount Graham Coalition, et al., Plaintiffs, v. Jack Ward Thomas, et al., Defendants, v. Arizona Board of Regents, on behalf of the University of Arizona, Intervenor-Defendant*, CIV 94-437-TUC-ACM, July 25, 1994.)

USFS and USFWS both agreed with the University regarding the 8.6 acre limitation:

> "Under the AICA, the telescope site must include not more than 8.6 acres within the 24 acre area within the 150-acre Coronado National Forest…"
>
> (*Federal Defendant's Opposition to Plaintiff's Motion for Temporary Restraining Order, Attorneys for Intervenor State of Arizona Board of Regents and U.S. Department of Justice, Mount Graham Coalition, et al., Plaintiffs, v. Jack Ward Thomas, et al., Defendants, v. Arizona Board of Regents, on behalf of the University of Arizona, Intervenor-Defendant*, CIV 94-437-TUC-ACM, July 25, 1994.)

The telescope project has now exceeded its allowable total of 8.6 impacted acres by more than 40%. The University of Arizona can no longer evade a full and open evaluation of its destructive telescope-related activities.

IMAGE 1. The following satellite image, from June 8, 2007, shows the areas adjoining the telescopes that have been deforested:

IMAGE 2. The following satellite image, from August 4, 2003, shows the areas adjoining the telescopes PRIOR to being deforested as shown in the above June 8, 2007, image:

IMAGE 3. The following image, made on November 12, 2010, shows impacted acreage cleared north of the Large Binocular Telescope (© Robin Silver Photography):

IMAGE 4. The following image, made on November 12, 2010, shows impacted acreage cleared north of the Sub millimeter Telescope (© Robin Silver Photography):

IMAGE 5. The following image, made on November 12, 2010, shows impacted acreage cleared north of the Utility Building (© Robin Silver Photography):

IMAGE 6. The following image, made on November 12, 2010, shows impacted acreage cleared northeast of the Vatican Telescope (© Robin Silver Photography):

In 1995, USFS examined the definition of "impacted acres." On February 28, 1995, the Forest Service sought to clarify confusion regarding "impacted acres" versus "degraded forest edge acres" in accounting "its [the University of Arizona's] 8.6 acres of 'impacted acreage' allowed under its [the University's] Special Use Permit." (*Correspondence, from Richard N. Kvale, District Ranger to Robin Silver, M.D., RE: clarification of confusion regarding two separate and distinct acreage measurements, "impacted acres" and "degraded forest edge acres"*; February 28, 1995.)

The Forest Service defines "impacted acres" as "irreversibly committed to the telescope development." An "irreversible commitment…cannot be changed over time or can be changed only over an extended period or with a large commitment of funds."

USFS defines "Degraded Forest Edge Acreage" as "other adverse secondary effects that cannot be avoided," i.e., "micro-climate changes along the edges of cleared areas, increased water yield from the areas directly impacted by construction, and sedimentation off-site outside the areas which were measured as 'impacted acreage'…" (*Ibid.*)

USFS' 1995 definition of "impacted acres" versus "degraded forest edge acreage" is consistent with their description of "Irreversible and Irretrievable Commitment of Resources" in the October 1986, Draft Environmental Impact Statement (DEIS):

> "Irreversible and Irretrievable Commitment of Resources…"Irreversible" commitment is a consignment of a resource that cannot be changed in time or can be changed only over an extended period or with a large commitment of funds that are usually unavailable. "Irretrievable" commitment of resources is a commitment that is lost and cannot be recovered for a specified period of time. Theoretically, construction of facilities (roads. buildings. etc.) for the proposed observatory is a "reversible" commitment of land and water. In practice it is an "irretrievable" commitment of land use. No observatory of any major size in the United States has ever been removed and the land restored… The direct losses of vegetation due to clearing and construction are irretrievable as are the losses due to windthrow associated with the opening of stands of spruce…"
>
> (*Draft Environmental Impact Statement, Proposed Mt. Graham Astrophysical Area, Pinaleno Mountains, Coronado National Forest*, USDA Forest Service; October 1986.)

USFS' 1995, DEIS definition of "impacted acres" versus "degraded forest edge acreage" is consistent with USFS' definitions in the November 1988, Final Environmental Impact Statement:

> "Primary effects are the acres of loss that result from the actual clearing of trees from suitable habitat….Secondary effects are the losses that occur in forested areas directly adjacent to the cleared areas. These secondary impacts occur because of the adjacent clearing and are either related to windthrow or to a concept called degraded forest edge."
>
> (*Final Environmental Impact Statement, Proposed Mt. Graham Astrophysical Area, Pinaleno Mountains, Coronado National Forest*, USDA Forest Service; November 1988.)

The acreage illegally cleared for the UA telescopes is "impacted" acreage resulting in "primary effects." The illegally cleared acreage is not merely "degraded" acreage or acreage reflecting "secondary effects." The illegally cleared acreage must be added to the 8.6 acres already impacted by the telescope project.

The acreage illegally cleared in connection with the telescope project is a high altitude, old growth forest clear cut. Recovery of old growth forests, especially at high elevations is problematic at best.

Concerning the restoration or recovery of old growth forest, the American Society of Foresters states:

> "… [w]ith present knowledge, it is not possible to create old-growth stands or markedly hasten the process by which nature creates them . . . the best way to manage for old growth is to conserve an adequate supply of present stands and leave them alone."
>
> (*Scheduling the Harvest of Old Growth: Report of the SAF Task Force on Scheduling the Harvest of Old-Growth Timber, Society of American Foresters*, SAF 84-89, May 2, 1984.)

Former USFS Chief Jack Ward Thomas agrees:

> "[It is] unlikely that forest managers can create functional old-growth through silvicultural manipulations of younger-aged, second-growth forests."
>
> (*Management and Conservation of Old-Growth Forests in the United States*, Thomas, J.W., et al., Wildlife Society Bulletin, 16:252-262 as cited in *Identification of Distinguishing Characteristics around Middens of Mount Graham Red Squirrels*, Mannan, R.W. and A.A. Smith, University of Arizona School of Renewable Natural Resources, Final Report, September 1991.)

In the past, it has generally been acknowledged that recovery of spruce - fir forest in the Pinalenos would require approximately 230 - 300 years. (*Dynamics of the Spruce-Fir Forests on the Pinaleno Mountains, Graham County, Arizona*, Julie C. Stromberg and Duncan T. Patten, The Southwestern Naturalist, 36(1):37-48, March 1991. *Identification of Distinguishing Characteristics around Middens of Mount Graham Red Squirrels*, Mannan, R.W. and A.A. Smith, University of Arizona School of Renewable Natural Resources, Final Report, September 1991.)

But now with increasing factors of global warming and climate change, spruce-fir forest recovery time will likely be significantly extended or certain more challenging. (*Dry Times Ahead*, Jonathan Overpeck and Bradley Udall, Science, June 25, 2010. *Model Projections of an Imminent Transition to a More Arid Climate in Southwestern North America*, Richard Seager, et al., Science, May 25, 2007. *Climate Warming and 21st-Century Drought in Southwestern North America*, Glen M. MacDonald et al., Eos, February 26, 2008:

> "A synthesis of climatological and paleoclimatological studies suggests that a transition to a more arid climate may be occurring due to global warming, with the prospect of sustained droughts being exacerbated by the potential reaction of the Pacific Ocean to warming. An analysis of 19 climate models by *Seager et al.* [2007] concluded that the transition to a more arid climate in southwestern North America is imminent due to increased air subsidence in the subtropics as the tropics warm and as equatorial convection increases… The widespread twelfth-century megadrought appears to have developed due to increased radiative forcing and climate warming, suggesting that ongoing radiative forcing and warming could be capable of locking much of southwestern North America into an era of persistent aridity and more prolonged droughts. Indeed, the early 21st-century drought could potentially signal the transition to such a state."

Widespread Increase of Tree Mortality Rates in the Western United States, Phillip J. van Mantgem, et al., Science, January 23, 2009. *Forest responses to increasing aridity and warmth in the southwestern United States*, A. Park Williams, et al., Proceedings of the National Academy of Science, June 4, 2010:

> "Forests within the southwestern United States appear particularly sensitive to drought and warmth. We input 21st century climate projections to the equations to predict growth responses. Our results suggest that if temperature and aridity rise as they are projected to, southwestern trees will experience substantially reduced growth during this century…")

UA astronomers and their partners have been plagued from the inception of the Mount Graham telescope project by problems caused by the surrounding trees. These problems include:

- interference with "seeing" quality of their telescopes secondary to air turbulence caused by the differential warming of the air layer near the trees (*Site Survey Progress Report, Cerro Pachon, Mauna Kea, and Mount Graham*, National Optical Astronomy Observations Newsletter, No. 21, 1 March 1990, pp. 32 - 34:

  > "Cerro Pachon appears quite similar to Mauna Kea, with very little turbulence. The effect of trees on Mt. Graham is quite pronounced."

  The Effects of Mountain Topography and Trees on Astronomical Seeing and Turbulence in the Local Boundary Layer, R.H. Cromwell, C.N. Blair and N.J. Woolf, Steward Observatory, 1993.

- soiling of the telescope mirrors caused by the sticky resins, pollen and terpenes produced by the surrounding trees (*Draft Environmental Impact Statement , Proposed Mt. Graham Astrophysical Area, Pinaleno Mountains, Coronado National Forest*, USFS, October 1986, p. 3-79:

  > "Air Quality…Existing Situation…Natural additions to the air come from…terpenes from conifers, dust from wind action, spores, and pollen."), and

- direct interference with the viewing radius of the telescopes, especially the SMT. (*Correspondence, from USFWS Regional Director Michael Spear, to USFS Regional Forester David Jolly, RE: Withdrawal of the request for additional acreage for road widening and viewpath clearing may be inappropriate as documentation exists to show both proposals may be needed*, September 19, 1989:

  > "Without the topping of the trees in the viewpath the submillimeter telescope cannot function.").

In 1996, UA astronomer JM Hill wrote:

> "Those of us with forested mountains in southern Arizona often look enviously at the photographs of treeless Cerro Paranal…The trees have the effect of raising the turbulent boundary layer from the ground to the top of the tree canopy…I joke that we have found the solution to this problem of trees when the Clark Peak forest fire started on Mt. Graham…" (The LBT Project, JM Hill, UA Steward Observatory, 1996)

Mount Wilson (California) astronomers have suffered similarly, but their telescopes are not in the forested heart of an endangered species' essential habitat. The Mount Wilson astronomers have been able to legally clear the trees from around their telescopes. (*Wilson Looking for Visitors, Officials at Mountaintop Observatory Fret over Drop in Tourism*, Becky Oskin, Staff Writer, Daily News, Los Angeles, CA, July 14, 2002:

> "…Thompson [Laird Thompson, a University of Illinois professor who lives at Mount Wilson half the year] and colleague Scott Tear of the New Mexico Institute of Mining and Technology say they can prove pines growing close to the telescope distort the air and disrupt their research…The trees also produce sticky pollen that coats the huge 100-inch mirror at the telescope's base, said Art Vaughan, a retired JPL astronomer/engineer and founding chairman of the Mount Wilson Institute.)

In addition to the illegally destroyed habitat immediately adjacent to the Mount Graham telescopes, another approximately 250 acres of spruce-fir forest habitat has been needlessly destroyed to help solve the UA astronomers' tree problems. Under the guise of fighting fire, the spruce-fir forest habitat has been destroyed from just east of East Emerald Peak for nearly ¾ of a mile uphill across Hawk Peak to just west of High Peak.

IMAGE 7. The following aerial image, made on November 7, 2010, shows the torched spruce-fir forest from the LBT to just west of High Peak (© Robin Silver Photography):

Destruction of this spruce-fir forest habitat is particularly concerning owing to the fact that only approximately 900 total acres of contiguous spruce-fir habitat exists. The destroyed spruce-fir forest habitat was recovering from earlier damage from various beetles and an aphid or thrip. Recovery of this spruce-fir habitat is essential for recovery of the Mount Graham Red Squirrel.

The circumstances surrounding the needless destruction of these approximately 250 acres of old growth spruce-fir forest habitat are extremely troubling. Daily fire and wind maps show that, in order for the telescopes to have been realistically threatened by the 2004 Nuttall Complex fire, the wildfire east of High Peak would have needed to move downhill against the wind and across the established fire lines west of and below High Peak. The chance of this happening and truly threatening the telescopes was remote at best.

Nonetheless, on July 8, 2004, approximately 250 acres of recovering spruce-fir forest habitat from east of the LBT across Hawk Peak to just west of High Peak were needlessly torched. The torching took place from the west to the east with the wind blowing from the west towards the east. (*Nuttall Complex Fire Map, Day Operational Period 07/06/2004 06:00 - 21:00*, Page 3, USFS. *RAWS [Remote Automated Weather Station] Station Summary*, Columbine, Arizona, Daily Summary for July 6, 2004, Western Regional Climate Center, Desert Research Institute, Reno, Nevada. *Nuttall Complex Fire Map, Day Operational Period 07/07/2004 06:00 - 21:00*, Page 4, USFS. *RAWS Station Summary, Columbine, Arizona, Daily Summary for July 7, 2004, Western Regional Climate Center, Desert Research Institute, Reno, Nevada. Incident Status Summary (ICS-209) Nuttall Complex, AZ-CNF-052, USFS*, July 7, 2004. *Nuttall Complex Fire Map, Day Operational Period 07/08/2004 06:00 - 21:00*, Page 4, USFS. *RAWS Station Summary, Columbine, Arizona, Daily Summary for July 8, 2004*, Western Regional Climate

Center, Desert Research Institute, Reno, Nevada. *Incident Status Summary (ICS-209) Nuttall Complex, AZ-CNF-052, USFS*, July 8, 2004.)

Nuttall Complex Fire Map, Day Operational Period 07/07/2004 06:00 - 21:00:

Nuttall Complex Fire Map, Day Operational Period 07/8/2004 06:00 - 21:00:

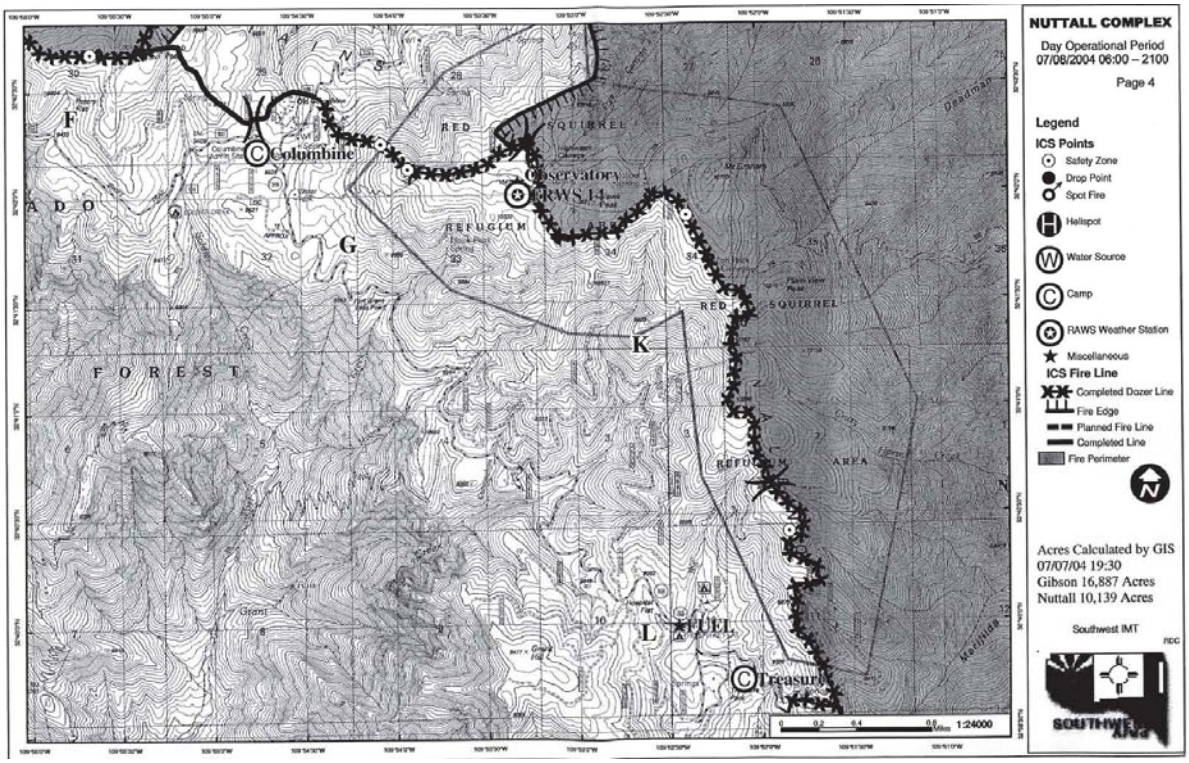

IMAGE 8: The following satellite image, from SEPTEMBER 19, 2003, PRIOR to the 2004 Nuttall Complex fire, shows the contiguous old-growth spruce-fire forest with the August 7, 2004, fire lines, wind direction and wild fire locations:

IMAGE 9: The following satellite image, from AUGUST 11, 2004, AFTER the 2004 Nuttall Complex fire, shows the torched old-growth spruce-fire forest with the August 7, 2004, fire lines, and August 8, 2004, wind direction and wild fire locations:

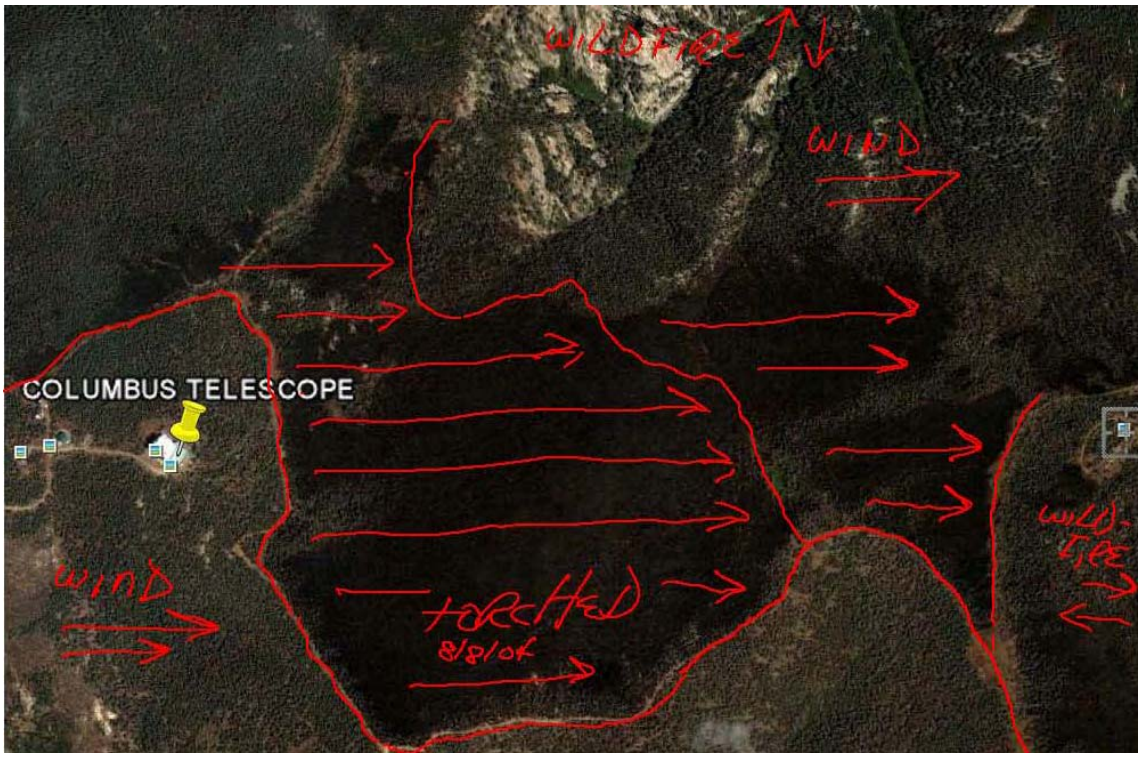

IMAGE 10: The following aerial image, made on November 7, 2010, shows the torched spruce-fir forest from the LBT to High Peak (© Robin Silver Photography). The August 7, 2004 fire lines and the August 8, 2004, wind direction and wild fire locations are superimposed.

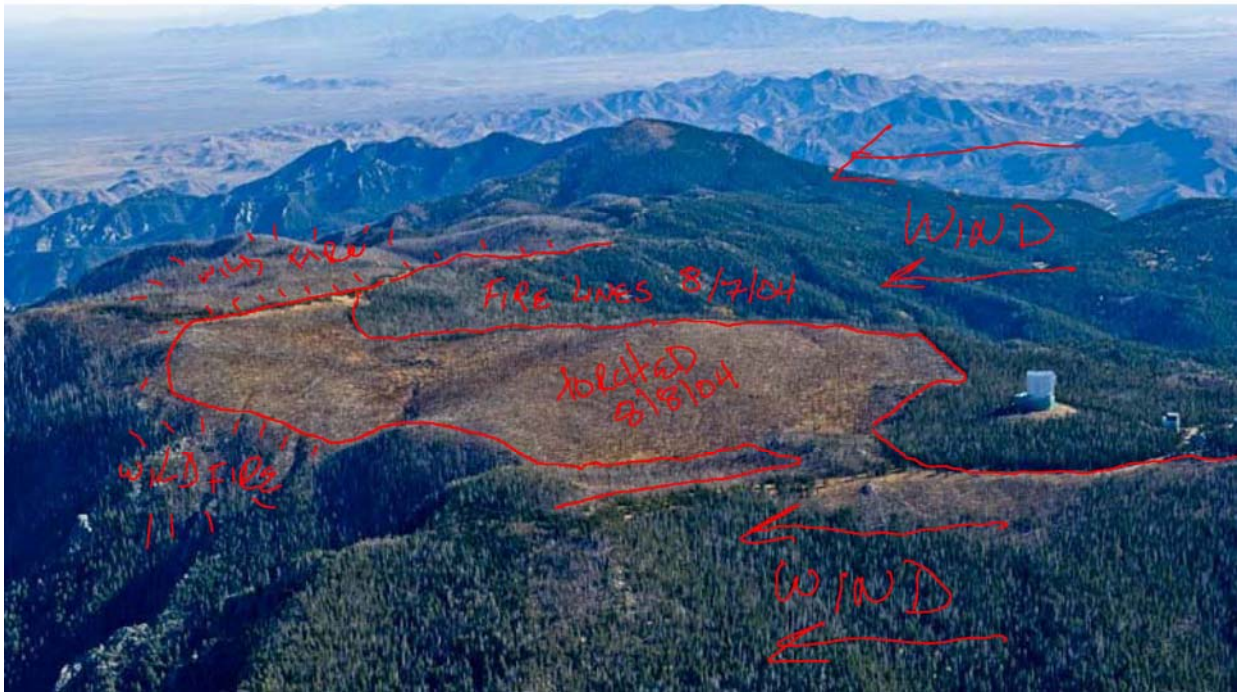

IMAGE 11. The following image, made on November 12, 2010, shows the torched spruce-fir forest with the LBT in the background (© Robin Silver Photography):

On July 8, 2004, UA Mount Graham telescope site manager John Ratje wrote:

> "Thursday, July 08 23:00 MST…The Observatory is in excellent shape -- all perimeter lines have been burned out and it rained a bit on site today. The high humidity and low wind on the mountain reduced the intensity of fire considerably. We are in a very defensible position (and that's for years in the future)…Cheers…"
>
> (News Brief, Thursday, July 08 23:00 MST, John R. Ratje, Site Manager, Mount Graham International Observatory, http://kp12m.as.arizona.edu/new_articles/nuttall_fire_2004/News_Briefs/news_brief_070804b.htm.)

REINITIATION OF CONSULTATION

Endangered Species Act (ESA) regulations (50 CFR 402.16) outline four general conditions requiring reinitiation of formal consultation: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the action is modified in a manner causing effects to listed species or critical habitat not previously considered; and (4) a new species is listed or critical habitat designated that may be affected by the action. All four conditions requiring reinitiation of formal consultation are applicable to the Mount Graham telescope project.

THE AMOUNT OF INCIDENTAL TAKE HAS BEEN EXCEEDED.

The amount of incidental take by telescope related activities has been exceeded twice. This has occurred in 1996, and in 2004, when firefighting efforts related to the telescopes, independent of firefighting efforts to protect squirrel and forest, killed many squirrels. In 1996, telescope related activities killed at least seven endangered red squirrels. (*Biological Assessment and Evaluation for Clark Peak Fire Emergency and Rehabilitation*, Consultation #60658793, USFS, August 30, 1996. *Biological Opinion on Clark Peak Fire Emergency Suppression and Rehabilitation*, USFWS, October 2, 1997.) In 2004, telescope related activities killed at least seven endangered red squirrels, one who was lactating (i.e., she had babies). (*The University of Arizona Mt. Graham Red Squirrel Monitoring Program 2004 Annual Report*, April 29, 2005.) Examination of the master midden survey maps will undoubtedly reveal even more losses, as the master maps extend beyond the UA monitoring areas and cover additional areas burned for telescopes, not for defense of forest or squirrel.

NEW INFORMATION REVEALS EFFECTS OF THE ACTION AFFECTING MOUNT GRAHAM RED SQUIRREL AND CRITICAL HABITAT IN A MANNER AND TO AN EXTENT NOT PREVIOUSLY CONSIDERED.

New information reveals that the telescope project and its related activities are affecting the Mount Graham Red Squirrel in a manner and to an extent not previously considered in the July 14, 1988, Biological Opinion.

The new information includes,

- RPA3 is based on flawed science and an illegal, preordained directive to provide for telescopes on Mount Graham. (*Deposition of USFWS biologist Lesley Fitzpatrick*, Mt. Graham Red Squirrel, et al., Plaintiffs, v. Clayton Yeutter, et al., Defendants, CIV 89-410 GLO ACM, January 11, 1990:

> "...Procedurally it was incorrect, and it was in violation of the law, and therefore it is incorrect regardless of whether it's procedural or substantive."

Deposition of USFWS Arizona State Office Supervisor Sam F. Spiller, Mt. Graham Red Squirrel, et al., Plaintiffs, v. Clayton Yeutter, et al., Defendants, CIV 89-410 GLO ACM, January 12, 1990:

A "We stated that any destruction of habitat on Emerald Peak pursuant to the observatory would have greater detrimental impacts than the proposal on High Peak. And that furthermore, these impacts on Emerald Peak could not be reduced below jeopardy to reasonable and prudent terms…

Q Do you, as a biologist, believe those conclusions are accurate as stated?

A Yes…

Q Mr. Spiller…In your opinion, was the section 7 process conducted properly, in your opinion as a biologist?

A No.

Q And why, in your opinion, was the process conducted improperly?

A We had a predetermined -- we had a predetermined intent to provide a preferred alternative that provided for scopes on High Peak, prior to completing the initial draft.

Q Before the draft was prepared, the determination had already been made that the scopes should go on High Peak, is that correct?

A Yes.

Q And who made that determination, that the scopes should go on High Peak?

A I was directed to do that by Mr. Spear [USFWS Regional Director Michael Spear]…

Q After the meeting between Mr. Spear, Mr. Young [USFWS Assistant Regional Director Jim Young] and representatives from the University, were you then instructed to prepare a Biological Opinion that would permit the telescope project to be placed on Emerald Peak?

A Yes."

GAO Record of Interview 140635 of USFWS Regional Director Michael Spear, April 16, 1990:

> "Sam Spiller of the PHX field office came to the RO [Regional Office] on 6-22-87 and was given by us the information regarding the "predetermination" of putting the UA project on Mt. Graham's High Peak…We simply told Sam that he was to include an alternative that would allow for the scopes on High Peak…
>
> On June 3, 1988 we met with…the FS, UA (President [Henry Koffler], VP for research [Laurel Wilkening], etc) in the afternoon. We presented them two alternatives (go somewhere else or High Peak with Mitigation) based on our earlier draft BO's, most recently from 8-31-87…"The UA went bananas."…The UA finally and clearly said that this was the scope that simply had to go on Emerald Peak and the Columbus is what made the entire project viable. Without the Columbus Scope, the project's other scopes could have gone to other sites not on Mt. G. UA, however, wanted to also put its Max Plank and Vatican scopes on either High or Emerald Peak but FWS told them that they could not have two peaks. This did not sit well with UA. Based on that option, Emerald Peak was their location of choice. After further discussions with the FS, I later told Sam Spiller of this

decision and told him to include an RPA which would accommodate the Emerald Peak development…"

US General Accounting Office Testimony on Fish and Wildlife Service's Biological Opinion addressing Mt. Graham Astrophysical Facility Before the Subcommittee on National Parks and Public Lands Committee on Interior and Insular Affairs and the Subcommittee on Fisheries and Wildlife Conservation and the Environment Committee on Merchant Marine and Fisheries House of Representatives, June 26, 1990:

> "...we believe that the government would have had difficulty in demonstrating to a court that the Emerald Peak development alternative was prepared in accordance with Endangered Species Act requirements for two principal reasons. First, the alternative is not supported by prior biological studies of Mt. Graham...Second, the FWS Regional Director who mandated inclusion of the alternative in the opinion informed us that he had no additional biological studies to clearly support the Emerald Peak development alternative and made his decision, in part, on the basis of nonbiological considerations..."

USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations, August 1, 1990:

> "…upon review of the biological opinion and the biological information used in its formulation, we found that in determining the effects of the action certain information was not considered or not fully considered in assessing the present state of the environment as well as the environment that would exist upon completion of the action in terms of the totality of factors affecting the species."

Correspondence, GAO Natural Resources Management Issues Director James Duffus, III, to Chairman Gerry E. Studds, Subcommittee of Fisheries and Wildlife Conservation and the Environment, U.S. House of Representatives, RE: University of Arizona criticism of GAO Testimony, November 9, 1990:

> "We continue to hold the view that the Emerald Peak development alternative contained in FWS' biological opinion was not supported by available biological evidence...In our view, the previous studies do not support the Emerald Peak development alternative under any circumstances. Biologists who authored these studies concluded then, and continue to believe, that any loss of critical habitat on Emerald Peak poses an unacceptable threat to the Mt. Graham red squirrel's existence.")

- The population density in the spruce-fire forest has declined precipitously. (*Draft Recovery Plan for the Mount Graham Red Squirrel Revision*, January 16, 2009:

> "From 1994-2002, the mixed conifer forest supported 54-83 middens within the study area [UA Monitoring Program], while the spruce-fir forest contained 120-224 middens. Abundance in the mixed conifer forest was relatively stable from 1994-2002; however, by 2002 only two occupied middens were found in the spruce-fir forest. Population declines in the spruce-fir forest corresponded with a period of insect damage and wildfires that began in 1996 and had devastated that forest type by 2002."

The University of Arizona Mt. Graham Red Squirrel Monitoring Program 2009 Annual Report, April 2, 2010.)

- Fragmentation of red squirrel habitat has increased dramatically with fire, clear cutting around structures, firefighting efforts to protect structures, and with movement of the LBT to East Emerald Peak. The importance of dispersal was not examined in the original July 14, 1988, Biological Opinion. (*USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations*, August 1, 1990:

> "Dispersal among areas apparently is an important aspect of the ecology of the Mount Graham red squirrel. Substantial fragmentation of the habitat inhibits dispersal and is likely to increase mortality among dispersers."

Identification of Distinguishing Characteristics around Middens of Mount Graham Red Squirrels, Smith, A.A., and R.W. Mannan, Journal of Wildlife Management 1994:

> "The Pinaleno Mountains are subject to human activities that could degrade habitat of the Mount Graham red squirrel by fragmenting remaining blocks of closed forest stands."

Mount Graham Red Squirrel Recovery Plan, USFWS, May 3, 1993.)

- Firefighting efforts to protect telescopes and buildings, independent of firefighting efforts to protect Mount Graham Red Squirrels and its Critical Habitat, have twice increased jeopardy to the squirrel. (*Mount Graham Red Squirrel Recovery Plan*, USFWS, May 3, 1993. *Biological Assessment and Evaluation for Clark Peak Fire Emergency and Rehabilitation*, Consultation #60658793, USFS, August 30, 1996. *Biological Opinion on Clark Peak Fire Emergency Suppression and Rehabilitation*, USFWS, October 2, 1997:

  > "In this biological opinion the Service finds that the effects of the suppression actions associated with the Clark Peak Fire, in addition to the current status of the species and the environmental baseline, have likely jeopardized the continued existence of, and likely destroyed or adversely modified designated critical habitat of Mount Graham red squirrel…"

  The University of Arizona Mt. Graham Red Squirrel Monitoring Program 2003 Annual Report, May 6, 2004. *The University of Arizona Mt. Graham Red Squirrel Monitoring Program 2004 Annual Report*, April 29, 2005.)

- Recovery of the Mount Graham Red Squirrel will not be possible as long as buildings are located in the fire-prone essential red squirrel habitat on Mount Graham. (*Biological Assessment and Evaluation for Clark Peak Fire Emergency and Rehabilitation*, Consultation #60658793, USFS, August 30, 1996. *Biological Opinion on Clark Peak Fire Emergency Suppression and Rehabilitation*, USFWS, October 2, 1997:

  > "In this biological opinion the Service finds that the effects of the suppression actions associated with the Clark Peak Fire, in addition to the current status of the species and the environmental baseline, have likely jeopardized the continued existence of, and likely destroyed or adversely modified designated critical habitat of Mount Graham red squirrel…"

  Wildland Fire Situation Analysis, Nuttall Complex, Coronado NF, July 3, 2004:

  > "Selected Alternative…Rationale for selecting this alternative…The alternative selected is designed to give consideration to fire fighter safety while minimizing loss to Mt. Graham International Observatory. Heliograph Peak Electronic Site, recreation residences and developed recreation facilities…Special consideration should be given to protection of the Mt. Graham International Observatory and recreation residences…Objectives…Mt. Graham International Observatory…Priority 10 [Priority (high = 10]… T&E Species…This location is the only habitat for the Mt. Graham Red Squirrel…Priority 8..."

  Draft Environmental Impact Statement for the Pinaleño Ecosystem Restoration Project, Coronado National Forest, USFS, June 2009:

  > "The MGIO [Mount Graham International Observatory] and other modern developments on the mountain have precipitated aggressive firefighting techniques, and inhibited the restoration of the natural ecosystem processes."

  Mount Graham Red Squirrel (Tamiasciurus hudsonicus grahamensis) 5-Year Review: Summary and Evaluation, U.S. Fish and Wildlife Service, January 15, 2008:

  > "…recent loss of habitat, particularly in the spruce-fir community, limits the potential for significant population recovery in the foreseeable future.").

- New information regarding the status and biology of red squirrels has become available since the July 14, 1988, Biological Opinion. The population density in the spruce-fir has declined to an extremely low level. The situation has

deteriorated to the point that plans for artificial propagation are now moving forward in spite of little chance of success. (*Correspondence, from Professor Chris Smith, Kansas State University, to USFS Safford District Biologist Kathleen Milne, RE: Low recent census numbers*, June 9, 1989:

> "Trying to save the population by taking it into captivity is unlikely to be successful. To the best of my knowledge, they have been bred in captivity once by Ferron in Quebec. Because they defend individual territories and the sexes are very aggressive towards each other except when the female is in heat, it would be very difficult to maintain them in any semblance of natural behavior in captivity."

USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations, August 1, 1990.) *Mount Graham Red Squirrel Recovery Plan*, USFWS, May 3, 1993. *Biological Assessment and Evaluation for Clark Peak Fire Emergency and Rehabilitation*, Consultation #60658793, USFS, August 30, 1996. *Biological Opinion on Clark Peak Fire Emergency Suppression and Rehabilitation*, USFWS, October 2, 1997. *The University of Arizona Mt. Graham Red Squirrel Monitoring Program 2003 Annual Report*, May 6, 2004. *The University of Arizona Mt. Graham Red Squirrel Monitoring Program 2004 Annual Report*, April 29, 2005. *Correspondence, from Mount Graham Red Squirrel Recovery Team to USFWS Regional Director Benjamin Tuggle, RE: Request to initiate emergency removal from the wild of a limited number of endangered Mount Graham red squirrels to establish a captive population*, May 22, 2006:

> "The species was listed as endangered in 1987 because its range and habitable area had been greatly reduced, and remaining habitat was threatened by a number of factors…
>
> …Estimated population size declined after 1999 and has changed relatively little over the past 4-5 years; the latest estimate in fall 2005 was 276 (±12) animals.
>
> …the already limited area of habitat was severely reduced by the 1996 Clark Peak Fire…and the 2004 Nuttall Complex Fire…Danger of catastrophic fire remains high due to continuing drought, heavy fuel loads, and increasing numbers of dead trees due to insect infestation and tree disease. Living trees stressed by recent fires and drought are particularly susceptible to insects and disease…
>
> …few MGRS now live beyond 2 years due to high predation and other forces of mortality...MGRS occur in unusually low density, have much larger home ranges, and show low productivity compared to closely related red squirrels in the White Mountains of Arizona…newly acquired satellite imagery shows extensive loss of habitable conditions within areas known to have formerly supported MGRS, especially within the high-elevation refuge area …for MGRS. A post-fire survey of 1,251 known middens found that only 455 still exist (almost a 64% loss). The pattern of habitat loss has resulted in greater isolation of inhabited patches from each other. Also, introduced Abert's squirrels, much larger than MGRS, may be excluding red squirrels from some habitable areas…
>
> In combination, these conditions are an extraordinary threat to persistence of MGRS and represent a reasonable trigger for our request to plan and eventually implement the proposed emergency removal and creation of a captive population."

Model Projections of an Imminent Transition to a More Arid Climate in Southwestern North America, Richard Seager, et al., Science, May 25, 2007. *Mount Graham Red Squirrel (Tamiasciurus hudsonicus grahamensis) 5-Year Review: Summary and Evaluation*, U.S. Fish and Wildlife Service, January 15, 2008:

> **"**Updated Information and Current Species Status…Biology:
>
> 1. Female MGRS go into estrus for <1 day each year (Koprowski 2005a).
>
> 2. Mount Graham red squirrels live a shorter life (2 years) than other red squirrel populations studied (4 years) (Zugmeyer 2007).

3. Most MGRS females only reproduce once in their life due to high adult mortality rates (Zugmeyer 2007).

4. Female MGRS give birth to fewer young (two) compared to other red squirrel populations studied (three or more) (Munroe et al. *in press*).

5. Mount Graham red squirrel's mortality is higher than other red squirrel populations studied. For any given population mortality rate, 80 percent of that is due to predation (Koprowski, unpublished literature 2007)…

…recent loss of habitat, particularly in the spruce-fir community, limits the potential for significant population recovery in the foreseeable future.

…Because Abert's squirrels are now found on Mt. Graham from the pine forest to the spruce-fir zones, it is likely that resource competition has increased between these species.

…Remaining suitable MGRS habitat is increasingly fragmented and degraded by insect outbreaks, poor forest health, and catastrophic wildfires."

Widespread Increase of Tree Mortality Rates in the Western United States, Phillip J. van Mantgem, et al., Science, January 23, 2009. *Draft Environmental Impact Statement for the Pinaleño Ecosystem Restoration Project*, Coronado National Forest, USFS, June 2009:

"In 1996 and 2004, large acreage, high intensity wildland fires expedited a reduction in the population of the Mount Graham red squirrel through habitat loss and mortality. Also, since 1996, progressive insect infestations have defoliated and killed trees in the spruce-fir and mixed-conifer forests of the Pinaleño Mountains. Tree mortality associated with these outbreaks has heightened the probability of wildland fire and contributed further to a decline in the red squirrel population through habitat loss. Today, the population of the red squirrel is at its lowest point since censuses were initiated in 1986, and the viability of the species is of paramount concern to both the Forest Service and other Federal and state wildlife management agencies…The MGIO [Mount Graham International Observatory] and other modern developments on the mountain have precipitated aggressive firefighting techniques, and inhibited the restoration of the natural ecosystem processes."

Dry Times Ahead, Jonathan Overpeck and Bradley Udall, Science, June 25, 2010. *Draft Environmental Assessment for Establishment of a Captive Breeding Pilot Program for the Endangered Mount Graham Red Squirrel*, USFWS, September 2010.)

THE TELESCOPE PROJECT AND ITS RELATED ACTIVITIES HAVE BEEN MODIFIED IN A MANNER CAUSING EFFECTS TO MOUNT GRAHAM RED SQUIRREL AND CRITICAL HABITAT NOT PREVIOUSLY CONSIDERED.

Modification to the project and its related activities are causing effects not considered in the July 14, 1988, Biological Opinion. The modifications and related activities and their effects not considered include:

- Mitigation measures, including removal of buildings (Columbine cabins and bible camp) located within potential recoverable habitat that were required to have been removed by RPA3 to offset the effects of the telescopes have not been fulfilled. RPA3 assumed that reforestation of these areas would begin prior to 2002. (*Arizona-Idaho Conservation Act, Public Law 100-696,* November 18, 1988. *Biological Opinion on Mt. Graham Astrophysical Area Plan*, USFWS, July 14, 1988. *USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations*, August 1, 1990.) The Columbine cabins and bible camp that were to have been removed are in the Ash Creek

drainage. The drainage is extremely important to Mount Graham Red Squirrel recovery as it is the only major block of good habitat outside of the spruce-fir forest. (*USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations*, August 1, 1990:

> "The Ash Creek drainage contains the major block of good habitat for red squirrels outside of the spruce/fir forest.)

The Special Use Permit status of the Bible Camp and the Cabins is not clear. For the Bible Camp, initially the Forest Service related an inability to cancel the Permit based on an exemption from NEPA review (16 USC 6236 - Ministerial issuance, or amendment). But this USFS rationale is false as it is based on the statute's own clarification that "the ministerial issuance or amendment of an authorization occurs only when the issuance or amendment of the authorization would not change the physical environment."

The physical environment of the Bible Camp site has and will continue changing as each round of firefighting protection for the Camp consumes more forest habitat. USFS refuses to clarify and to provide documentation of the Permit status in spite of inquiry and Freedom of Information Act request.

For the Columbine cabins, USFS is preparing an Environmental Impact Statement, the status of which is not clear. (*Federal Register 73 FR 74170, Environmental Impacts Statements; Notice of Availability EIS No. 20080494, Draft EIS, AFS, AZ, Safford Recreation Residences Project*, Proposes To Issue 88 New Special-Use-Permits for Occupancy and Use of Recreation Residence, Safford Ranger District, Coronado National Forest, Graham County, AZ. *USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations*, August 1, 1990:

> "This alteration to the project through the change in conditions of reasonable and prudent alternative 3 causes an effect not considered in the biological opinion due to the maintenance of habitat fragmentation within the Ash Creek drainage and maintenance of extensive human use within the drainage, both of which would have been significantly reduced.")

- The destructive footprint size of the telescope project has been dramatically increased. (See the attached satellite images on page 6 of this document, and the attached images from the ground on pages 7 and 8.)
- Unnecessary firefighting efforts related to the project, independent of firefighting efforts to protect squirrel and forest, have needlessly destroyed significant amounts of recovering, essential spruce-fire forest habitat. This destruction would not have taken place but for the presence of the telescopes. (See attached aerial images on pages 12 and 15, and the attached satellite images on page 14 of this document.)
- Firefighting practices to date (from 1996 and from 2004) have established that future firefighting efforts will again be focused on the primacy of building defense at the expense of squirrel and forest. There is no guarantee that these inappropriate practices will stop. As a result, future firefighting efforts focused on the primacy of building defense will (a) increasingly jeopardize the squirrel, will (b) continue to destroy its essential habitat and will (c) preclude recovery of both the squirrel and forest. (*Wildland Fire Situation Analysis, Nuttall Complex*, Coronado NF, July 3, 2004:

> "Selected Alternative…Rationale for selecting this alternative…The alternative selected is designed to give consideration to fire fighter safety while minimizing loss to Mt.

Graham International Observatory. Heliograph Peak Electronic Site, recreation residences and developed recreation facilities…Special consideration should be given to protection of the Mt. Graham International Observatory and recreation residences…Objectives…Mt. Graham International Observatory…Priority 10 [Priority (high = 10]… T&E Species…This location is the only habitat for the Mt. Graham Red Squirrel…Priority 8..."

Draft Environmental Impact Statement for the Pinaleño Ecosystem Restoration Project, Coronado National Forest, USFS, June 2009:

"The MGIO [Mount Graham International Observatory] and other modern developments on the mountain have precipitated aggressive firefighting techniques, and inhibited the restoration of the natural ecosystem processes.")

Mount Graham Red Squirrel (Tamiasciurus hudsonicus grahamensis) 5-Year Review: Summary and Evaluation, U.S. Fish and Wildlife Service, January 15, 2008:

"…recent loss of habitat, particularly in the spruce-fir community, limits the potential for significant population recovery in the foreseeable future.").

- Minimal viable development for the University and its partners consists of seven telescopes not three telescopes. Evaluation of a three telescope project is a sham as the University has made it clear that they need seven telescopes for a viable project:

"The University has regularly and consistently communicated to the Coronado Forest and Region 3 offices that the PA [Draft Environmental Impact Statement Preferred Alternative] does not provide for or allow a viable cost effective research facility, because of that alternative's restricted locations and restricted size of the proposed land allocation."

(*Correspondence, from UA Vice President for Research and Dean of the Graduate College Laurel L. Wilkening to USFS Regional Forester Sotero Muniz*, RE: Astrophysical Proposal for Mt. Graham, Arizona, August 17, 1987.)

"We have been very clear all along that our minimum viable project is seven telescopes."

(Mount Graham observatory options given, Agency allows 3 telescopes, UA seeking 7, Gene Varn, Arizona Republic, July 16, 1988.)

"This alternative is acceptable but cannot be implemented as written. It is acceptable because it could allow for the development of a viable observatory on a single peak, provided sufficient land allocation is made for seven telescopes. It cannot be implemented because it does not allow the timely…Alternative Three is acceptable and provides the best opportunity to achieve a viable observatory, provided it permits construction access via 669 and 507 until a new road is completed and provided that sufficient land is allocated for seven telescopes."

(*Correspondence, from UA Vice President for Research and Dean of the Graduate College Laurel L. Wilkening to USFS Coronado National Forest Supervisor Robert Tippeconnic*, RE: USFS Biological Opinion 7/14/88 - Your Letter of 7/15/88 Astrophysical Proposal for Mt. Graham, Arizona, July 22, 1988.)

"Alternative E (7 telescopes) in this Final Environmental Impact Statement (FEIS) represents the proponents minimum viable astrophysical development proposal to replace their January 1987, 10 telescope proposal."

(*Final Environmental Impact Statement, Proposed Mt. Graham Astrophysical Area, Pinaleno Mountains*, Coronado National Forest, USFS, November 1988.)

"We [the University of Arizona] talked about this [UA astro proposals] with FS and our need for 7 scopes but the FS continued to propose only 4 sites on High Peak. This was non-viable to us."

(*GAO Record of Interview 140635 with Michael Cusanovich*, University of Arizona Vice President of Research, May 15, 1990.)

"The Future Size of the Observatory…Throughout the process, the University has attempted to avoid the "foot in the door" approach and stated from the outset that a minimum of seven telescopes was needed for viability."

(*Mt. Graham International Observatory Related Issues*, University of Arizona, June 1, 1990.)

"In February/March, 2002, Mr. B.E. Powell of the University of Arizona, mentioned the University would be coming forward with a proposal for 4 more telescopes…I recommend you contact the University for more information."

(*Correspondence, from USFS Safford District Ranger to Maricopa Audubon Society Conservation Chair Robert Witzeman, RE: Four more telescopes*, May 1, 2002.)

"Astronomers, who describe the top of the Pinaleno Mountains as one of the world's best spots for gazing into the heavens, want to build four more telescopes here in the heart of critical habitat for an endangered squirrel."

(*Mt. Graham scope dedication tonight*, Mitch Tobin, Arizona Daily Star, October 15, 2004.)

"There continues to be discussion regarding proposals for additional astrophysical facilities to be added to the existing MGIO site on Mt. Graham. This would entail additional buildings and at least one road with a parking lot for the planned visitor center…

…the University of Arizona is planning for additional telescopes and a visitor center on Mt. Graham."

[*Mount Graham Red Squirrel (Tamiasciurus hudsonicus grahamensis) 5-Year Review: Summary and Evaluation*, U.S. Fish and Wildlife Service, January 15, 2008.]

The ESA requires that a Biological Opinion analyze the cumulative effects of the project in question. Cumulative effects are defined as:

"Cumulative effects - are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation."

(50 CFR §402.02)

The University of Arizona has made it clear that at least seven telescopes are necessary for viability of their Mount Graham project. Consequently, denial of

anything less in a consultation insults ESA's requirement to evaluate "private activities…that are reasonably certain to occur." (50 CFR §402.02)

A cumulative effects analysis was not included in the July 14, 1988, Biological Opinion:

> "The jeopardy determination should have been on an evaluation of the action (astrophysical observatory) along with cumulative effects (if any) of future non-federal activities, measured against an environmental baseline of all past and present effects on the Mt. Graham red squirrel. Significant effects that contribute to the endangered status of the Mt. Graham red squirrel were not included in the analysis of the action's effects. Failure to factor significant effects into the environmental baseline before evaluation of the action's effects expanded the buffer available before the jeopardy threshold was breached."
>
> *(USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations*, August 1, 1990.)

With the University's acknowledgment of their need for seven telescopes for viability of their project, the project can no longer be justifiably evaluated at the three telescope level. The July 14, 1988, Biological Opinion allows for further development conditioned on studies and additional findings of no jeopardy. This violates 5 CFR 402.14(k) as there is no chance that the viable seven telescope project will do anything but jeopardize the continued existence of the Mount Graham Red Squirrel and will increasingly result in the destruction and adverse modification of more habitat.

- Roads that were to have been closed pursuant to RPA3 have not been closed:

> "At least two roads that were closed (and had begun to reforest themselves) after the MGIO was built were bladed open to successfully fight the catastrophic Nuttall-Gibson Complex wildfire of 2004. There is discussion between the USDA Forest Service (FS) and the Service regarding a FS proposal to keep the bladed roads clear of brush and trees to facilitate future firefighting efforts...
>
> …The FS will keep Forest Road 507 and 669 open (for use by official vehicles only) until 2012 to facilitate restoration of areas burned in 2004. We note that obliterating and reforesting these two roads were requirements of the 1988 Biological Opinion (BO) (2-21-86-F-75) concerning the creation of an astrophysical observatory in MGRS suitable habitat on Mt. Graham. The 1988 BO's third Reasonable and Prudent Alternative was implemented (in part) by the 1988 Arizona-Idaho Conservation Act (PL 100-696), which required closure of the two roads and established the Refugium. The implementation of this alternative avoided jeopardizing the continued existence of the MGRS."
>
> [*Mount Graham Red Squirrel (Tamiasciurus hudsonicus grahamensis) 5-Year Review: Summary and Evaluation*, U.S. Fish and Wildlife Service, January 15, 2008.]

CRITICAL HABITAT HAS BEEN DESIGNATED THAT NOT ONLY HAS BEEN AFFECTED BY THE TELESCOPES, BUT HAS BEEN SIGNIFICANTLY, ADVERSELY MODIFIED BY THE TELESCOPES AND THEIR RELATED ACTIVITIES.

If a new species is listed or critical habitat designated that may be affected by the telescope project reinitiation of consultation must take place.

- Critical Habitat has been designated and has been significantly destroyed since the July 22, 1988, Biological Opinion. (*Designation of Critical Habitat for the Endangered Mount Graham Red Squirrel*, 55 FR 425, US Fish and Wildlife Service, January 5, 1990:

> "Although the squirrel does still survive, its range and numbers have been reduced, and its habitat is threatened by a number of factors, including proposed construction of an astrophysical observatory…Excellent habitat is in short supply for this species, totaling only four percent of the total habitat…at June 1989 estimated population levels (116-167 individuals), no reduction in the protection for important habitat can be supported biologically.")

The direct and indirect destruction of critical habitat has appreciably diminished the value of critical habitat for both the survival and recovery of the Mount Graham Red Squirrel.

All four triggers (exceeding of take, new project effects not previously evaluated, modification of the project, and Critical Habitat designation) that require reinitiation of formal consultation pursuant to ESA regulations (*50 CFR 402.16*) have been surpassed for the Mount Graham telescope project. Reinitiation of consultation must now be undertaken to avoid further violation of law.

BACKGROUND

In 1973, at the dedication of the Mount Hopkins telescopes in the Santa Rita Mountains southeast of Tucson, Congressman Mo Udall warned University of Arizona astronomers that Mount Hopkins would be their last mountain. The astronomers had already secured Mount Lemmon in the Catalinas and Kitt Peak in the Quinlans. The dedication now marked their taking of Mount Hopkins.

But the astronomers would not listen to Mo Udall's warning. They wanted Mount Graham also.

Nothing has deterred the University of Arizona astronomers from pursuing this objective. Not destruction of the old growth spruce-fir forest heart of the struggling Mount Graham Red Squirrel's surviving habitat. Not the fact that Mount Graham is of central religious and cultural importance to the traditional Apache. And certainly not the laws and ethics that ordinarily protect special places like Mount Graham.

On May 21, 1986, the Mount Graham Red Squirrel was proposed for protection as endangered under the Endangered Species Act (ESA). Acknowledged threats to the squirrel included "proposed construction of an astrophysical facility." (*Proposed Determination of Endangered Status and Critical Habitat for the Mount Graham Red Squirrel*, 51 FR 18630, May 21, 1986)

UA opposed proposed ESA protection for the squirrel. On July 21, 1986, UA became the first university in United States history to oppose ESA protection for an endangered species. UA asked that USFWS "give serious consideration to protective measures short of listing the species." (*Correspondence, from UA President Henry Koffler, to USFWS Regional Director Michael Spear, RE: Opposition to ESA protection for the Mount Graham Red Squirrel*, July 21, 1986.)

On June 3, 1987, in spite of UA protest, the Mount Graham Red Squirrel received endangered species protection under the ESA. The Federal Register announcing the protection observes,

> "[P]roposed observatory construction is considered a threat to the Mount Graham red squirrel…the observatory is proposed in the vicinity of one of the densest squirrel areas…
>
> Because the construction of an observatory in the Graham Mountains could pose significant threats to the Mount Graham red squirrel and because this proposed action is presently pending for permit approval by the U.S. Forest Service, the Service considers that the protection available to the species…should be implemented as soon as the public receives notice of the final listing decision."
>
> (*Determination of Endangered Status for the Mount Graham Red Squirrel*, Final Rule, 52 FR 20994, June 3, 1987.)

Earlier, in October 1986, the Draft Environmental Impact Statement, Proposed Mt. Graham Astrophysical Area (DEIS) had been released. The DEIS' preferred alternative, its least destructive alternative, provided the UA astronomers with a site on High Peak, but said of the selection:

> "The direct loss of 23 acres and indirect loss of 120 acres, including approximately 80 acres in the best Red Squirrel habitats, is a significant loss. Such loss places the Red Squirrel in even greater jeopardy of extinction and compounds the problems of improving its habitat and increasing its numbers to remove it from jeopardy…The risk analysis of the PA [preferred alternative] indicates that over a 30 year period there is a 35 percent probability of extinction."
>
> (*Draft Environmental Impact Statement, Proposed Mt. Graham Astrophysical Area, Pinaleno Mountains, Coronado National Forest*, USDA Forest Service; October 1986.)

The UA astronomers were not happy. The University responded:

> "The University has regularly and consistently communicated to the Coronado Forest and Region 3 offices that the PA [Preferred Alternative] does not provide for or allow a viable cost effective research facility, because of that alternative's restricted locations and restricted size of the proposed land allocation."
>
> (*Correspondence, from UA Vice President for Research Laurel Wilkening to USFS Regional Forester Sotero Muniz, RE: Astrophysical Proposal for Mt. Graham, Arizona*, August 17, 1987.)

And there were other problems with the DEIS that continue to plague the University to this day. The Department of Interior (DOI) observed that the DEIS was not complete and was not legally adequate. DOI observed:

> "The major deficiency is the failure to adequately address practicable alternatives that may be available on other mountains…

The Mt. Graham area is a nationally significant desert "sky island" ecosystem with unique wildlife resources and associated public uses and economies. The developmental alternatives in the DEIS including the preferred alternative would result in detrimental impacts to the spruce/fir zone and associated habitats on Mt. Graham. This is inappropriate pursuant to the National Environmental Policy Act (NEPA) requirements regarding the analysis of all reasonable alternatives, because the DEIS has been restricted to consideration of more and less damaging alternatives that are located only on Mt. Graham…

Mt. Graham contains several significant floras and faunas. The 580 acres of spruce/fir habitat on the summit are the southernmost extension of this type in North American and it is the only sky island with both Englemann spruce and corkbark fir…"

(*Correspondence, Patricia Sanderson Port, Regional Environmental Officer, US Department of the Interior Office of Environmental Project Review, to Mr. R.B. Tippeconnic, Forest Supervisor, Coronado National Forest, RE: Comments on the Draft Environmental Impact Statement , Proposed Mt. Graham Astrophysical Area*, January 16, 1987.)

DOI also advised USFS,

"The American Indian Religious Freedom Act should be addressed regarding Native American religious use of the proposal area." (*Ibid*.)

DOI's advice concerning Native American use of Mount Graham addressed what was becoming publicly apparent. The Coalition for the Preservation of Mount Graham also wrote to USFS regarding the DEIS and Native American use of Mount Graham:

"We have since identified a group of San Carlos Apache people who are still using the high peaks of the Pinalenos for religious reasons. Evidently this religious use of the mountain is contemporary and has been happening over the last few hundred years.

Mt. Graham is considered to be a sacred mountain to members of the San Carlos Apache tribe. Mt. Graham is still being used for certain religious rites by these people. The proposed development is viewed as potentially damaging to the Apache religion and the ceremonies that take place there...

…The astrophysical development can be viewed as a violation of their religious freedom rights as Native Americans by the San Carlos Apaches affected by it. These impacts should be addressed."

(*Correspondence, Paul C. Pierce, Director, Coalition for the Preservation of Mt. Graham to Coronado National Forest, RE: Comments on the Draft Environmental Impact Statement, Proposed Mt. Graham Astrophysical Area,* January 19, 1987.)

DOI and the Coalition for the Preservation of Mt. Graham were refuting a key, summary DEIS statement,

"…no Indian tribes have come forward with information on potential impacts to their religious use of Mt. Graham at this time."

(*DEIS 2-46, and 3-84*)

The USFS' DEIS summary statement was, of course, a lie. Mount Graham is of central religious and cultural importance to the traditional Apache.

The Coronado National Forest Supervisor presiding over the Mount Graham DEIS proceedings at the time knew that the DEIS was lying in regard to Indian religious use of Mount Graham. The Supervisor was Robert Tippeconnic. Mr. Tippeconnic is a Comanche Indian who was raised on the White Mountain Apache Indian Reservation.

Supervisor Tippeconnic admits that,

> "…he knew many traditional Apaches considered Mount Graham to be sacred, but would be reluctant to describe their feelings to non-Indians."
>
> (*STAR WHORES: The ruthless pursuit of astronomical sums of cash and scientific excellence*, John Dougherty, Phoenix New Times, June 16, 1993.)

But Mr. Tippeconnic said nothing. Mr. Tippeconnic was promoted to USFS' national liaison for Indian Tribes after leaving the Coronado National Forest.

The University of Arizona also knew the DEIS was lying in denying knowledge of Native American religious use of Mount Graham. Since 1968, the Apache had entrusted the University of Arizona with documentation of their belief in Mount Graham's central sacred and cultural importance. (*Goodwin Papers Summary, Jeanne Armstrong, Arizona State Museum, University of Arizona, November 1985*.)

The Apache counted on their interests being protected by (1) the information held at the University of Arizona that they had related to Grenville Goodwin, and (2) by the knowledge of their beliefs by USFS Coronado Supervisor Tippeconnic.

The Apache miscalculated. As it became obvious that the Apache were being betrayed by both the University and by the Forest Service, they debated going public.

On October 4, 1989, San Carlos Apache Tribal Elder Ola Cassadore Davis spoke publicly. She granted a request for interview with the Tucson Citizen:

> "To us Apache, it [Mount Graham] is a very sacred place. It's really important to my people to not have those things (telescopes) built up there…"
>
> (*Apache may seek halt on Graham*, Norma Coile, Tucson Citizen, October 4, 1989.)

On June 8, 1990, University of Arizona Vice President for Research Michael Cusanovich attacked Apache Elder Cassadore Davis:

> "The University is not aware of any adverse impact on the cultural heritage of Native Americans…We are aware of one Navajo woman residing in Tucson who appeared on television with her concern over disturbing spirits on the mountain..."
>
> (*Correspondence, from University of Arizona Vice President for Research Michael Cusanovich, to Chairman James H. Scheuer*, Subcommittee on Natural Resources, RE: Misinformation in correspondence to Max Plank Institute and Smithsonian Institute, June 8, 1990.)

On July 10, 1990, the San Carlos Apache Tribal Council passed Resolution No. 90-68 in opposition to the University's telescope project. The Council declared:

> "WHEREAS, for generations our elders have instructed us on the sacredness of *Dzil nchaa si an* (Big Seated Mountain, aka Mt. Graham) and its vital importance for maintaining the integrity of our Apache culture and tradition; and

WHEREAS, this mountain, Mt. Graham, is essential to the continued practice of physical and spiritual healing by Apache Medicine men/women, and to their apprenticeship as competent traditional religious specialists; and

WHEREAS, this mountain, Mt. Graham, is the site of a sacred spring, a variety of sacred plants and animals all of which are necessary for performance of certain traditional religious Apache ceremonies; and,

WHEREAS, this mountain, Mt. Graham, is the site of a substantial number of Apache burials; and,

WHEREAS, any permanent modification of the present form of this mountain constitutes a display of profound disrespect for a cherished feature of the Apache's original homeland as well as a serious violation of Apache traditional religious beliefs…

WHEREAS, the proposed destruction of this mountain will contribute directly to the destruction of fundamental aspects of tradition and spiritual life of the Apaches.

NOW THEREFORE BE IT RESOLVED THAT:

The San Carlos Apache Tribe states its firm and total opposition to the construction of a telescope on the top of Mt. Graham and the Tribe stands ready to defend its constitutional rights if this project is allowed to continue."

(*Resolution No. 90-68, San Carlos Apache Tribal Council*, July 10, 1990.)

On June 4, 1991, the San Carlos Apache Tribal Council wrote to the Forest Service:

"As you know, *Dzil nchaa si an* (Mt. Graham) is sacred to Apache people. Since the early stages of telescope development, the University of Arizona and the Forest Service have known of its religious and cultural importance to our Tribe. The legal mandate for Forest Service compliance with protective cultural, archeological and religious statutes has never been revoked. The Forest Service has completely failed to comply with its legal mandate to protect the cultural, archeological and historic resources affected by the telescope project. The Forest Service has violated its duty to respect the religious freedom of Indian people.

We anxiously await your order to revoke the Board of Regents/University of Arizona construction permit and to stop all destructive activity on *Dzil nchaa si an* (Mt. Graham). In addition to yourself, Mr. Jolly, and Coronado National Forest Supervisor Abbott, we have sent copies of this letter and of Dr. Brandt's attached summary to the Arizona Board of Regents, Dr. Manuel Pacheco at the University of Arizona, Dr. Hans Zacher at the Max Plank Institute, Pope John Paul II at the Vatican, the Ohio State University Board of Trustees, Dr. E. Gordon Gee at Ohio State University, and Dr. Franco Pacini at the Arcetri Observatory, so that it will be very clear who would continue to deny us our religious and cultural rights. "

(*Correspondence, from San Carlos Apache Tribal Council, to USFS Regional Forester David Jolley, RE: Immediate permit revocation and immediate cessation of construction activity on Dzil nchaa si an (Mt. Graham)*, June 4, 1991.)

On October 31, 1991, UA Coordinator of Indian Programs Gordon Krutz publicly confirmed the validity of the Apache claims:

> "On October 30, 1991, I called Jack Moortel, Special Assistant to Governor Symington, to reveal that my study of the Goodwin papers evidence support to the Apache Survival Coalition's claim to the Spiritual significance of Mt. Graham!"
>
> (*Field notes #46 for October 30, 1991 - another update on Mt. Graham, by Gordon V. Krutz, University of Arizona Coordinator of Indian Programs*.)

On November 12, 1991, UA Office of Indian Programs Director Robert Williams also publicly confirmed the validity of the Apache claims:

> "Through its own research, investigation, and consultation, OIP [Office of Indian Programs] staff has compiled information during the past several months that documents many of the basic claims made by members of the San Carlos Apache Tribal Community as to the religious and sacred nature of Mt. Graham in Apache culture and traditions."
>
> (*Memo, from Robert A. Williams, Jr., Director, Office of Indian Programs, to UA President Manuel Pacheco, RE: Mt. Graham Project and San Carlos Tribal Community, November 12, 1991*.)

By April 1992, nearly every traditional religious leader of the San Carlos Apache Tribe signed a petition to stop the telescopes from interfering with their ability to practice their religion:

> "We the undersigned spiritual leaders of the Apache people acknowledge the central sacred importance of Dzil nchaa si an (Mt. Graham) to the traditional religious practice of the Apache. We oppose the Mt. Graham telescope project because it will interfere with the ability of the traditional Apache to practice their religion."
>
> (*Petition of the Apache spiritual leaders*, April 1992.)

But when the Apache challenged the project in Court, the University of Arizona opposed their efforts.

On April 7, 1992, the University of Arizona asked the Court to dismiss the Apache concerns. The University told the Court,

> "…equity aids the vigilant, not those who slumber on their rights.
>
> …it is in the public interest of the United States for the project to go forward. Since University is a public school which stands to lose both money and prominence in the field [of astronomy] should this project fail, public interest factor weighs against an injunction."
>
> (*Intervenor's Opposition to Motion for Preliminary Injunction, University of Arizona*, Apache Survival Coalition, Ola Cassadore Davis, and Ernest Victor, Plaintiffs, vs. United States of America, et al, Defendants, The University of Arizona, Intervenor, CIV. No. 91-1350-PHX-WPC, April 7, 1992.)

The University of Arizona also directly challenged the validity of the Apache religion in Court. The University's challenge was based on the testimony of two UA professors, one an astronomer, and the other a historian. Both were jesuit priests.

UA astronomer and Vatican Observatory Director Father George Coyne testified:

> "We are not convinced by any of the arguments thus far presented that Mt. Graham possesses a sacred character which precludes responsible and legitimate use of the land...In fact, we believe that responsible and legitimate use of the land enhances its sacred character."
>
> (*University of Arizona Exhibit B, Statement of the Vatican Observatory on the Mt. Graham International Observatory and American Indian Peoples, George V. Coyne, S.J., Director, Vatican Observatory*, Apache Survival Coalition, et al. v. USA, et al., University of Arizona, intervenor, CIV. No. 91-1350 PHXM WPC, April 6, 1992.)

UA history professor Father Charles Polzer testified:

> "...As an ordained priest and trained theologian as well as historian and anthropologist, I know that anthropological appeals to this court regarding the sacredness of Mt. Graham to the Apache is little more than a preposterous misuse of academic status and the poorest manifestation of sound methodology as I have witnessed in recent times."
>
> (*University of Arizona Exhibit C, Affidavit of Father Charles W. Polzer, S.J., Curator of Ethnohistory, University of Arizona's Arizona State Museum, University of Arizona*, Apache Survival Coalition, et al. v. US, et al., University of Arizona, intervenor, CIV. No. 91-1350 PHX WPC, April 6, 1992.)

On April 8, 1994, the Court agreed with the University. (*Apache Survival Coalition, et al., Plaintiffs v. USA et al., Defendants, and the University of Arizona, Intervenor*, US District Court of Appeals, Ninth Circuit, 21 F.3d 895, April 8, 1994.)

The University of Arizona's Mount Graham efforts could return to their supreme focus on "money and prominence."

But the Apache opposition to the University and Arizona's and its telescope partners' ongoing desecration of the Apache sacred mountain remains resolute. In fact, as recently as September 13, 2010, White Mountain Apache Tribe responded harshly to the University's and USFS' latest attempt to resolve "the Indian problem" with a newly proposed "memorandum of agreement" to smooth the way for renewal of the expired telescope Special Use Permit;.

In correspondence to USFS, the White Mountain Apache Tribe writes:

> "The White Mountain Apache Tribe has been closely involved with and consistently opposed to the University of Arizona's Mount Graham Observatory for more than two decades…
>
> …The parties to the telescope operations within the Dzil Nchaa Si An sacred site shall work with the Forest Service to specify a date by which the operations shall cease and the "footprint" restored to its pre-development condition, including removal of all roads, power lines, communication facilities, etc…
>
> … The White Mountain Apache Tribe rejects the MoA and respectfully requests that the project proponent University of Arizona and the other state and federal agencies go back to the drawing board, fulfill both general trust responsibilities and Mr. Nau's [President's Advisory Council for Historic Preservation Chairman John Nau] specific pledge to "address the tribe's

concerns," and focus on closing the gaps between our four-part position and the reality of the continuing and expanding damage and desecration from the Observatory…

…The unacceptable quest to avoid NEPA compliance, coupled with inattention to Executive Order 13007 on the protection of American Indian Sacred Sites, is further evidence of a neglect of tribal and public trust responsibilities by the Forest Service, ACHP, and other agencies involved in the use or management of Dzil Nchaa Si An. As the White Mountain Apache Tribe continues to await affirmative federal government attention to fiduciary duties, our obligation as a beneficiary is to inform you, our trustee, of past and present fiduciary failures, especially the insistence on providing beneficial services to the exclusive interests of the University of Arizona at American Indian expense.

…Instead of properly insisting upon specific and meaningful avoidance and reduction of the Observatory's many impacts on Dzil Nchaa Si An and the American Indian people and communities who pray through and rely upon this sacred mountain, the Forest Service and University appear bent on finding ways to limit for another two decades the impacts of our reasonable and constructive requests on harmful and desecrating Observatory operations.

…We respectfully request that…the federal and state governments embrace responsibilities for creating public and tribal benefits and for protecting American Indian sacred sites and those who revere and depend upon these critically endangered holy places."

(*Correspondence, from White Mountain Apache Tribal Chaiman Ronnie Lupe, to Coronado National Forest Supervisor Jim Upchurch, RE: Agreement Document for Proposed Observatory Permit Renewal*, September 13, 2010.)

But I digress.

On August 31, 1987, the USFWS completed its draft Biological Opinion on the DEIS proposal. USFWS concluded,

"...Destruction of habitat on Emerald Peak for siting an observatory would have greater detrimental impacts than the proposed siting on High Peak. Furthermore, those impacts on Emerald Peak could not be reduced below jeopardy with reasonable and prudent alternatives."

(*Draft Biological Opinion on the effects of the Mt. Graham Astrophysical Plan on the Mt. Graham red squirrel*, USFWS, August 31, 1987.)

The University of Arizona astronomers were not happy again.

The University of Arizona notified the Forest Service that the High Peak alternative did "not provide for or allow a viable cost-effective research facility." (*Correspondence from UA Vice President for Research Laurel Wilkening to USFS Regional Forester Sotero Muniz, RE: Astrophysical Proposal for Mt. Graham*, August 17, 1987.)

The Forest Service then suspended formal consultation and requested that the University present its own proposal for a "minimum viable observatory." (*Opinion, Mt. Graham Red Squirrel et al., v. Edward R. Madigan et al., and State of Arizona Board of Regents, University of Arizona, Defendant-intervenor-Appellee*, United States Court of Appeals, Ninth Circuit, 954 F2d 1441 R Madigan, January 21, 1992.)

On June 3, 1988, UA President Henry Koffler, UA Vice President for Research Laurel Wilkening and others met with USFWS Regional Director Michael Spear in Safford. After the meeting, Spear ordered his subordinates to provide the University with an Emerald Peak alternative in the final Biological Opinion. (*Deposition of USFWS Arizona State Office Supervisor Sam F. Spiller*, Mt. Graham Red Squirrel, et al., Plaintiffs, v. Clayton Yeutter, et al., Defendants, CIV 89-410 GLO ACM, January 12, 1990. *GAO Investigation Record of Interview of USFWS Regional Director Michael Spear*, April 16, 1990.)

By July 14, 1988, the Biological Opinion with the preordained Emerald Peak result was released providing the UA astronomers with an observatory on Emerald Peak. The University had moved one step closer to getting their "foot in the door" on Mount Graham.

UA wrote USFS:

> "Alternative Three is acceptable and provides the best opportunity to achieve a viable observatory, provided it permits construction access via 669 and 507 until a new road is completed and provided that sufficient land is allocated for seven telescopes."
>
> (*Correspondence, UA Vice President for Research Laurel Wilkening, to Coronado National Forest Supervisor Robert Tippeconnic, RE: USFS Biological Opinion 7/14/88*, July 22, 1988.)

The National Environmental Policy Act's (NEPA'S) Final Environmental Impact Statement was now the last hurdle for University of Arizona to fully secure their "foot in the door" on Mount Graham. But this would prove to be an impossible hurdle.

The Mount Graham telescope project cannot pass the scrutiny of a NEPA evaluation because of (1) the requirement for mandatory examination of alternative astronomy sites, and (2) examination of the value of Mount Graham without development on its summit.

And then there was "the Indian problem." How long would the Apache remain silent publicly about their religious concerns that they had privately entrusted to the University and to the Forest Service?

The University's only chance of success would be to quickly buy a congressional legislative exemption to circumvent NEPA law. To fulfill their needs, the University hired Washington, DC lobbying firm Patton, Boggs and Blow.

A million dollars and a few months later and the University of Arizona had its exemption from the problematic full disclosure environmental law.

On October 13, 1988, the University of Arizona's legislative rider, Title VI - Mount Graham International Observatory of the Arizona-Idaho Conservation Act (AICA) passed the U.S. Senate. On October 20, 1988, AICA passed the House of Representatives.

On October 28, 1988, at the Tucson house of UA Vice President for Community Relations Allan Beigel, the University's Mount Graham warriors celebrated. They did so with a red squirrel piñata. (*How the UA Knocked Off Mt. Graham - Basically the same way General Motors works*, Charles Bowden, City Magazine, January 1991.)

On November 18, 1988, AICA was signed into law. The NEPA/EIS process was aborted. An incomplete, abridged "Final" Environmental Impact Statement was codified into law.

AICA also codified RPA3 of the July 14, 1988, Biological Opinion was also codified into law.

RPA3 provided the UA astronomers with a telescope development site west of Emerald Peak. Emerald Peak is located approximately one mile west of the Mount Graham summit, High Peak.

The UA astronomers had secured their "foot in the door" on Mount Graham.

But the astronomers were not home free. In April 1989, surveys found only 99 Mount Graham Red Squirrels. (*Squirrel numbers drop; telescope project imperiled - U.S. to reassess effect of UA plan on Mt. Graham*, Gene Varn, The Arizona Republic, May 2, 1989.)

Concerned about the critically low squirrel numbers, on May 12, 1989, the USFS Deputy Regional Forester asked the University to hold off on ground disturbing activities. He also recommended to the Forest Service Chief "that all ground disturbing activities be stayed pending your review of the appeals." (*Correspondence, from USFS Deputy Regional Forester R. Forrest Carpenter to USFS Chief Dale Robertson, RE: Recommendation to stay all ground disturbing activities pending Chief's review of appeals*, May 12, 1989.) Several appeals had been filed in January 1989 primarily to address the inadequacies of the July 14, 1988, Biological Opinion and the need to evaluate the precarious status of the Mount Graham Red Squirrel.

USFS Deputy Regional Forester Carpenter wrote,

> "…new survey information indicates that the squirrel population may have decreased and that the Biological Situation may be different than that described in the USFWS Biological Opinion of July 14, 1988. In response to these new population estimates, the Region will initiate more intensive surveys of the squirrel to verify the population estimates…After the population estimates have been verified the Region will consider if consultation should be reinitiated in compliance with P. L.*100·696* and the endangered species act." (*Ibid*.)

UA astronomers went ballistic. But they had another problem.

In servicing the University's Mount Graham needs, their senators, Dennis DeConcini and John McCain, had to convince skeptical fellow senators to support the University's exemption legislation. Senator DeConcini promised,

> "The legislation conforms to the Endangered Species Act…"
>
> (*Congressional Record - Senate, S15741, October 13, 1988*.)

Earlier, Senator John McCain had reassured his fellow senators,

> "With enactment of this amendment…we will have befriended the sciences and all they mean to our future. Most important, we will have accomplished all of this while maintaining a sensitivity and interest in the smallest of creatures - the Mount Graham red squirrel." (*Ibid*.)

But with the red squirrel numbers dropping perilously and with the Endangered Species Act requiring reevaluation of the telescopes' effects on such a small population, UA reached out to their senators once again.

Senator DeConcini instantly reneged on his promise that "the legislation conforms to the Endangered Species Act." And similarly, Senator McCain's "[m]ost important…sensitivity and interest in the smallest of creatures" conveniently vanished.

UA's senators sprang into action.

From the subsequent, 1990, US General Accounting Office (GAO) investigation we learned that,

> "[On May 17, 1989,]… Mike Jimenez from Sen. McCain's office called the F.S. to say that the Senators were angry over the F.S. regional decision to grant the stay in road building & that during the briefing already scheduled, there would be some "ass-chewing."
>
> The following day (May 18, 1989), the meeting with the delegation took place. The attendees were Flannely, Abbott, Contrerez (FS T&E Coordinator), McCain, DeConcini, Kolbe…At the outset of the meeting Sen. McCain "read the FS staff the riot act." Sen. McCain Sen. McCain did 90% of the talking during the 1 hour…During McCain's oration he severely chastised the F.S. for dragging its feet. He said he had an understanding with the Chief and he was very upset that the understanding was not being honored as evidenced by the Regional Forester's recommendation to grant the stay.
>
> During this expression of anger Mr. McCain told Mr. Abbott [Coronado National Forest Supervisor Jim Abbott] that "if he did not cooperate on this project he would be the shortest tenured Forest Supervisor in the history of the Forest Service."
>
> Mr. McCain concluded by stating that he perceived the stay as a delay. He further said the staff should tell the Chief that McCain believed the stay should not be approved. Quote "The message better get back to the Chief."
>
> Mr. Flannely had a briefing the next morning with the Chief. It was attended by himself, Jim Abbott, Contrerez, and Denny Schweitzer (acting director for land managerial planning). Mr. Flannely said the Chief confirmed a previous understanding with McCain. The Chief directed Flannely to finish the decision and to deny the stay. The Forest Service concluded that the legislation was so specific that there was no latitude in making permit decisions."
>
> He [Flannely] understood both from comments made by Senator McCain and the F.S. Chief (Robertson) that the two had an understanding that the F.S. would not stand in the way and would facilitate the Mt. Graham project. Sen. McCain said in his presence that the F.S. told him to get legislation if he wanted this project. He said he got the legislation & he wanted the F.S. to move expeditiously with the permits. Mr. Flannely understood, in this context, that the Chief told McCain that if the project went through the normal process it would probably result in a "no - go" decision; hence the need for legislation."
>
> (*GAO Investigation Record of Interview of Dick Flannelly, USFS Land Management and Planning,* May 7, 1990)

In January 1990, the USFWS lead Mount Graham biologists admitted under oath that they were ordered by their superiors to provide for telescopes on Emerald Peak in spite of biological information to the contrary. The GAO investigation resulted from the fall out and embarrassment to the University, their Senators, and USFWS. (*Deposition of USFWS biologist Lesley Fitzpatrick*, Mt. Graham Red Squirrel, et al., Plaintiffs, v. Clayton Yeutter, et al., Defendants, CIV 89-410 GLO ACM, January 11, 1990. *Deposition of USFWS Arizona State Office Supervisor Sam F. Spiller*, Mt. Graham Red Squirrel, et al., Plaintiffs, v. Clayton Yeutter, et al., Defendants, CIV 89-410 GLO ACM, January 12, 1990. *Pair: told to fudge data on red squirrel*, Sam Negri, The Arizona Republic, February 7, 1990.)

The USFWS biologists' depositions took place on January 11, 1990 and January 12, 1990. On March 26, 1990, the Court stopped the project for 120 days to give Congress a chance to correct the flawed basis of the July 14, 1988, Biological Opinion, the cornerstone of the UA exemption legislation. (*Order, Mount Graham Red Squirrel, et al., Plaintiffs, vs. Clayton Yeutter, et al., Defendants*, CIV 89-410 GLO ACM, March 26, 1990. *Judge OKs 4-month work ban on Mount Graham telescopes*, Sam Negri, The Arizona Republic, March 27, 1990. *Findings of Fact and Conclusions of Law, Mount Graham Red Squirrel, et al., Plaintiffs, vs. Clayton Yeutter, et al., Defendants*, CIV 89-410 GLO ACM, April 11, 1990.)

During the March 26, 1990, courtroom Hearing regarding an injunction, the University maintained that even if its telescope project were to result in the extinction of the Mount Graham Red Squirrel, no Court had a right to stop the project:

> "On several occasions, Marquez [U.S. District Judge Alfredo C. Marquez] interrupted Todd [UA lawyer David Todd] and Bradfish [U.S. Department of Justice lawyer Larry Bradfish] asking them if, hypothetically, it were shown that the project would result in the squirrels' extinction, wouldn't it make "common sense" to stop the project and take another look?
>
> Todd responded, "If it turned out it was going to kill every squirrel, could anything be done? I must say, "No, I doubt it.'"
>
> (*Judge OKs 4-month work ban on Mount Graham telescopes*, Sam Negri, The Arizona Republic, March 27, 1990.)

The GAO investigation and a subsequent USFWS Blue Ribbon Scientific Biological Opinion Update Team both confirmed the July 14, 1988, Biological Opinion's inadequacy and illegality.

On June 26, 1990, the GAO testified:

> "...we believe that the government would have had difficulty in demonstrating to a court that the Emerald Peak development alternative was prepared in accordance with Endangered Species Act requirements for two principal reasons. First, the alternative is not supported by prior biological studies of Mt. Graham...Second, the FWS Regional Director who mandated inclusion of the alternative in the opinion informed us that he had no additional biological studies to clearly support the Emerald Peak development alternative and made his decision, in part, on the basis of nonbiological considerations..."
>
> (*US General Accounting Office Testimony, "Views on Fish and Wildlife Service's Biological Opinion Addressing Mt. Graham Astrophysical Facility*," Statement of James Duffus, III, Director, Natural Resources Management Issues Resources, Community, and Economic Development Division, Before the Subcommittee on National Parks and Public Lands, Committee on the Interior and Insular Affairs, and the Subcommittee on Fisheries and Wildlife Conservation and the Environment, Committee on Merchant Marine and Fisheries, House of Representatives, June 26, 1990.)

The subsequent USFWS Blue Ribbon Biological Opinion Biological Update Team concluded:

> "In summary, the Team found that reinitiation of consultation is warranted based on the criteria found in the Endangered Species Act Section 7 regulations relative to: (1) the development of new information that reveals the action may affect the Mt. Graham red squirrel in a manner or to an extent not previously

considered; (2) modifications to the' action that cause an effect not considered in the biological opinion, and (3) an affect to critical habitat designated since the biological opinion.

In addition, upon review of the biological opinion and the biological information used in its formulation, we found that in determining the effects of the action certain information was not considered or not fully considered in assessing the present state of the environment as well as the environment that would exist upon completion of the action in terms of the totality of factors affecting the species."

(USFWS Mt. Graham Red Squirrel Biological Update Team Findings and Recommendations, August 1, 1990.)

The University's response to the GAO investigation was not one of contrition. The University attacked the GAO. (*Correspondence, from UA Vice President for Research Michael A. Cusanovich to GAO, RE: Response to GAO Report*, July 18, 1990.)

GAO was not intimidated by the University. GAO responded:

"Our testimony raised questions about the soundness of the biological opinion prepared by the Department of the Interior's Fish and Wildlife Service (FWS) on the University of Arizona's proposed Mt. Graham observatory. Specifically, we pointed out that (1) the alternative contained in the FWS biological opinion authorizing development on Emerald Peak was not supported by prior biological studies, (2) the FWS regional director who mandated the Emerald Peak development alternative had no additional biological studies to support his decision and instead made his decision, in part, on the basis of nonbiological considerations, and (3) recent evidence indicates that the Mt. Graham red squirrel's prospects have worsened since the FWS biological opinion was issued.

We have examined the University's assertions, each of which is addressed in the enclosure, and do not believe they have merit. We continue to hold the view that the Emerald Peak development alternative contained in FWS' biological opinion was not supported by available biological evidence...In our view, the previous studies do not support the Emerald Peak development alternative under any circumstances. Biologists who authored these studies concluded then, and continue to believe, that any loss of critical habitat on Emerald Peak poses an unacceptable threat to the Mt. Graham red squirrel's existence."

(*Correspondence, from GAO Natural Resources Management Issues Director James Duffus, III, to Chairman Gerry E. Studds, Subcommittee of Fisheries and Wildlife Conservation and the Environment, U.S. House of Representatives, RE: Response to the University of Arizona's disagreements with our June 26, 1990*, testimony, November 9, 1990.)

But UA did not care that the basis of its Mount Graham telescope project and the cornerstone of its congressional exemption legislation had been proven flawed and unlawful. Instead of helping correct the errors, the University of Arizona chose to defend its corrupt exemption legislation in Court.

And the University prevailed, as the Court concluded:

> "Regardless of the legality of the Biological Opinion, Congress adopted it and enacted it into law. Whether Congress was acting under a misapprehension of fact or law is irrelevant once legislation has been enacted..."
>
> (*Opinion, Mt. Graham Red Squirrel et al., v. Edward R. Madigan et al., and State of Arizona Board of Regents, University of Arizona, Defendant-intervenor-Appellee*, United States Court of Appeals, Ninth Circuit, 954 F2d 1441 R Madigan, January 21, 1992.)

Then on December 7, 1993, UA broke the law again!

Under cover of darkness, the University illegally cleared a new and different site outside of their authorized area for their Columbus or (newly renamed) Large Binocular Telescope (LBT). The University moved outside of their specifically defined, legislatively codified map location. And in the process, they destroyed more than 500 old-growth spruce-fir trees.

On July 28, 1994, the US District Court confirmed that UA and their agency accomplices did indeed act illegally, again. The Court issued another injunction against the University and its telescope project.

On July 28, 1994, the Court stopped the University,

> "…from doing any further work on the LBT site until the ESA and NEPA requirements are met."
>
> (*Court's Findings of Fact and Conclusions of Law and Order*, Mount Graham Coalition, et al. v. Jack Ward Thomas, et al., July 28, 1994.)

But again, instead of complying with Court Order and environmental law, the University of Arizona procured its second special congressional Mount Graham exemption legislation. The second special exemption legislation retroactively legalized the University's change of location to the newly cleared site on East Emerald Peak without the necessity to obey environmental law.

The University's second special exemption legislation became law on April 25, 1996. The UA telescope project had again managed to evade the scrutiny of NEPA and ESA review. But the second congressional exemption rider did not change RPA3's limitation of the finite total of 8.6 impacted acres.

Now the University of Arizona has been caught breaking the law, yet once again!

This time the telescope project has exceeded the total of 8.6 impacted acres authorized in RPA3. The project must now face the legally required, reevaluation that UA has endeavored so diligently to avoid.

LEGAL FRAMEWORK

The Endangered Species Act (ESA) was enacted as a result of congressional findings that "species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation," and that "other species of fish, wildlife, and plants have been so

depleted in numbers that they are in danger of or threatened with extinction." *16 U.S.C. § 1531(a)*.

The purpose of the ESA is to "provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species…" 16 U.S.C. § 1531(b). The principal responsibilities under the Act are imposed on the Secretary of Interior, with regard to terrestrial species. Id. The Secretary of the Interior, in turn, has delegated day-to-day authority for implementation of the Act to the USFWS. *50 C.F.R. § 402.01(b).*

Before a species may receive protection under the ESA, it must be listed by the USFWS· as "endangered" or "threatened." An "endangered" species is defined as "any species which is in danger of extinction throughout all or a significant portion of its range…" *16 U.S.C. § 1532(6)*. A "threatened" species is "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Id. at *§ 1532(20).*

The ESA also requires the USFWS to "designate critical habitat" for listed species. *16 U.S.C. § 1533(b)(2)*. In order to determine which areas are critical habitat, the USFWS "shall consider those physical and biological features are essential to the conservation of a given species and that may require special management considerations or protection.

Under the ESA and its implementing regulations, it is illegal for anyone to "take" an endangered or threatened species. *16 U.S.C. § 1538(a)(1), 50 C.F.R. §§ 17.21, 17.31*. The term "take" means to "harass, harm, pursue, hunt, shoot, would, kill, trap, or capture, or collect, or to attempt to engage in any such conduct." *16 U.S.C. § 1532(19)*.

Section 7(a)(1) of the ESA provides that each federal agency must "utilize [its] authorities in furtherance of purposes" of the ESA, *16 U.S.C. § 1536(a)(1),* and , under section 7(a)(2), "[e]ach federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded or carried out by such agency…is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat…" *16 U.S.C. § 1536(a)(2)*. Agency "actions" subject to this prohibition include "all activities or programs of any kind authorized, funded, or carried out, in whole or in part" by the agency. *50 C.F.R. § 402.02*, including the "granting of licenses, contracts…[and] permits," id. at § *402.02(c)*, and "actions directly or indirectly causing modifications to the land, water, or air." Id. at *§ 402.02(d)*.

To ensure that the mandate of section 7 of the ESA is carried out, Congress, along with the federal officials charged with implementing the ESA, have established a detailed "consultation" process that must be followed by federal agencies whose actions may affect endangered or threatened species. Under this process, "[e]ach agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat." *50 C.F.R. § 402.13(a).* If such a determination is made, the agency must, prior to making any final decision, enter into "formal consultation" with the USFWS unless the USFWS concurs in writing that the action is "not likely to adversely affect any listed species or critical habitat." *50 C.F.R. § 402.14(b).*

Following formal consultation and the USFWS must issue a "biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of

critical habitat." *50 C.F.R. § 402.14(g)(4); 16 U.S.C. § 1536(b).* If such a determination is made, the USFWS "shall suggest those reasonable and prudent alternatives which he believes would not violate [section 7(a)(2) of the ESA" and can be taken by the Federal agency or applicant in implanting the agency action. *16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)(5)*.

Under § 7(b)(4) of the ESA, if the USFWS concludes that an action will not violate section 7(a)(2) but will nevertheless result in an "incidental take" of a protected species, it "shall provide the Federal agency and applicant concerned…with a written statement" that, among other things, "specifies the impact of such incidental taking on the species" and "specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact…" *16 U.S.C. § 1536(b)(C)* (emphasis added).

Section 7(d) of the Act provides that, once the consultation process has been initiated, "the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2) of this section." Id. at *§1536(d).* According to the ESA implementing regulations, "[t]this prohibition is in force during the consultation process and continues until the requirements of section 7(a)(2) are satisfied." *50 C.F.R. § 402.09*.

Reinitiation of formal consultation is required and "shall be requested by the Federal agency or by the Service where discretionary Federal involvement…has been retained or is authorized by law" and if, among other reasons, "new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered" or " the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion." *50 C.F.R. § 402.16*.

Title VI - Mount Graham International Observatory of the Arizona-Idaho Conservation Act (AICA) somewhat complicates the reinitiation process on Mount Graham. Reasonable and Prudent Alternative Three (RPA3) of the July 14, 1998, Biological Opinion is incorporated into AICA. RPA3 provides that, among other limitations,

> "[a] total of 8.6 acres would be committed to the Observatory…"

As long as the telescope project does not exceed 8.6 total impacted acres, no reinitiation of consultation can take place. RPA3 as incorporated into AICA also provides exemption for a taking of up to six Mount Graham Red Squirrels. As explained in detail above, both of these thresholds have been surpassed. The telescope project is no longer exempt under AICA from ESA reinitiation.

The Ninth Circuit Court of Appeals agrees. The Ninth Circuit Court of Appeals examined this issue when, in 1993, the University moved outside of its assigned and specifically mapped location that is incorporated into AICA.

The Court ruled:

> "37…Nothing in the language of the AICA indicates that Congress intended to waive the ESA and NEPA requirements for a site other than that specifically identified in RPA 3, or to provide the FS with the authority to deviate from RPA 3 Figure A without complying with the ESA and NEPA. The federal defendants and

the University argue that the AICA allotted the FS discretion to locate the first three telescopes within the 150-acre specified area, providing that the telescopes occupied no more than 24 total acres. This is not an accurate reading of the AICA. Section 601(b) provides that all seven of the proposed telescopes should be located within the prescribed area. AICA Sec. 601(b). This provision thereby set the parameters for the location possibilities of the four additional proposed telescopes--they, together with the first three whose locations were specified in RPA 3 Figure A, may not occupy more than 24 acres within the specified 150-acre area.]

38. This conclusion is supported by three additional points. First, the provisions of the AICA altering RPA 3 demonstrate that Congress did not intend to change the location specifications in RPA 3 Figure A, or broaden the scope of the environmental law exemption provided in the AICA beyond the locations noted in RPA 3 Figure A. In AICA, Congress expressly altered features of RPA 3 involving special use authorizations for summer homes and a bible camp. AICA Sec. 605. RPA 3 required that these special permits would not be renewed, but AICA provided that they "shall continue." AICA Sec. 605. Congress did not, on the other hand, provide that sites indicated on the map referenced in RPA 3 or the "cluster" concept which was key to RPA 3's goal of minimizing harm to the red squirrel should or could be changed. Congress thereby demonstrated that it made whatever changes in RPA 3 which were required to further its intent. Since Congress did not indicate that the sites specified in RPA 3 Figure A could be changed at the discretion of the FS, we must assume that the exemption to the requirements of the ESA and NEPA was limited to the sites indicated in RPA 3 Figure A.

39. Second, section 602(a) of the AICA shows that Congress did not intend to waive the ESA and NEPA requirements for the new LBT location. Section 602(a) provides that section 7 of the ESA is "deemed satisfied" for "an access road to the Site." AICA Sec. 602(a) (emphasis added). The district court found that relocating the LBT to Peak 10,477 would require the construction of an additional access road. The University argues that the new road is merely a "short spur road leading from the AICA-sanctioned 'access road'." However, the record demonstrates that RPA 3 and AICA contemplated a single access road running straight through to each of the three telescopes. Locating the LBT at Peak 10,477 would disrupt this flow, instead requiring somewhat of a "Y" shaped road. The district court's finding that this did not qualify as a single access road was not clearly erroneous. This finding supports the district court's holding that Congress did not contemplate that construction on Peak 10,477 would be exempt from the ESA and NEPA.

40. Finally, the AICA evidences Congress' intent that the telescope project get underway promptly after the passage of the Act. Section 602(a) requires that the Secretary of Agriculture "immediately approve" the construction of the first three telescopes, support facilities, and an access road. AICA Sec. 602(a) (emphasis added). In order to facilitate immediate action and preclude lengthy debate as to the locations upon which the initial three telescopes would be built, Congress referenced and incorporated RPA 3. It is apparent from the language of the AICA and the urgency with which it was enacted, see Red Squirrel II, 954 F.2d

at 1454-56, that Congress intended to settle the controversy surrounding the telescope project by authorizing the immediate construction of three telescopes at the sites noted in RPA 3 Figure A. It is inconsistent with this aim to suggest that Congress would sanction the delays that would result from the selection of a different site and the litigation which would surely ensue.

41. We hold that the AICA does not provide the FS with the authority to select a site for the LBT other than that indicated in RPA 3 Figure A without complying with the ESA and NEPA. Our conclusion does not compel the construction of the LBT on the site noted in RPA 3 Figure A regardless of new environmental information or the effect it could have on the red squirrel. Rather, we simply hold that, in order to relocate the LBT, the FS must comply with the requirements of the ESA and NEPA."

(*Opinion, Mount Graham Coalition, et al., Plaintiffs-Appellees, v. Jack Ward THOMAS, et al., Defendants-Appellants, State of Arizona Board of Regents, Defendant-Intervenor-Appellant*, United States Court of Appeals, Ninth Circuit, April 24, 1995.)

USFS must now reinitiate consultation to avoid further violation of the ESA *(50 C.F.R. § 402.16)*.

CONCLUSION

The Mount Graham Red Squirrel faces increasingly serious jeopardy. Its population numbers are low with only a little more than 200 surviving.

The Mount Graham Red Squirrel became imperiled primarily because of piecemeal destruction of its canopied forest habitat. Piecemeal habitat destruction has been increasing.

While global warming, small population dynamics, wildfire potential, and forest insect pests remain problematic, only the presence of buildings and their accompanying knee-jerk protection efforts can be controlled. And controlled, they must be, if the squirrel is to survive and recover.

As long as buildings remain within habitat essential for the Mount Graham Red Squirrel's survival and recovery, and as long as future firefighting efforts continue to be consumed by the primacy of building protection, jeopardy to Mount Graham Red Squirrel cannot be remedied. The telescopes and other structures must be removed and the habitat recovered if the Mount Graham Red Squirrel has any chance of survival.

Mount Graham astronomers and their partners can do their work elsewhere. But the Mount Graham Red Squirrel has nowhere else to go. In its quest for "money and prominence," the University of Arizona cannot be allowed to shove the Mount Graham Red Squirrel over the brink of extinction.

Reinitiation of consultation must now be undertaken by the Forest Service with Fish and Wildlife Service to avoid further violation of law and to save the Mount Graham Red Squirrel. No irretrievable commitment of resources is permitted during this consultation and until jeopardy-removing alternatives and measures are in place.

In 60 days, on February 22, 2011, the Center for Biological Diversity, Maricopa Audubon Society, and the Mount Graham Coalition will seek judicial relief if you have still not reinitiated formal consultation regarding the increasingly deadly effects of the continued presence on Mount Graham of telescopes and other structures on the severely endangered Mount Graham Red Squirrel and its Critical Habitat.

If you have further questions, please contact Robin Silver, M.D., Center for Biological Diversity, P.O. Box 1178, Flagstaff, AZ 86002, by mail; by phone: (602) 799-3275, or by Email: rsilver@biologicaldiversity.org.

Sincerely,

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