

ENVIRONMENTAL ASSESSMENT OF THE CONTINUED USE OF A
SAGUARO WILDERNESS SPRING TO SUPPLY WATER FOR LIVESTOCK ON
THE U. S. FOREST SERVICE HAPPY VALLEY GRAZING ALLOTMENT
RINCON MOUNTAIN DISTRICT
SAGUARO NATIONAL MONUMENT

PURPOSE AND NEED

Grazing in southern Arizona is marginal and succeeds best when water is available to supply the needs of the livestock. Grazing in the Rincon Mountains of Saguaro National Monument ceased as of December 31, 1975 when the Special Use Permit allowing use of water from Turkey Creek (Turkey Creek Spring/Blackberry Spring) expired (NPS, 1974a). Correspondence after that time referenced this use of water, but apparently followup ceased after the Superintendent rescinded the use of the spring and pipeline in 1977.

Turkey Creek Spring is located in T14S, R18E, NE1/4 S28-unsurveyed (Figure 1). A Case Incident Record (NPS, 1989) reported that a water diversion system was observed in Turkey Creek that drained water from within Saguaro National Monument to a cattle tank on U. S. Forest Service land. A pipeline had been constructed, in Saguaro wilderness, that runs from the spring to a watering trough outside the Monument boundary. Past correspondence between NPS officials and a former permittee on this allotment discussed the continued use of this water (See HISTORIC PERSPECTIVE).

This assessment is necessary to determine the impacts of the use of the spring in Turkey Creek and the location of the pipeline on this area of wilderness in Saguaro National Monument. This assessment will evaluate environmental impacts, evaluate the effects on wilderness values, and recommend a course of action to follow to protect all park resources including these values.

HISTORIC PERSPECTIVE

The National Park Service was created by act of Congress in 1916 as part of the Department of the Interior by the NPS Organic Act. A primary purpose of the act was to preserve natural areas in their natural state as is exhibited in the statement:

...which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same by such manner and by such means as will leave them unimpaired for the enjoyment of future generations (16 USC 1).

Saguaro National Monument was established by Presidential

Figure 1. Location of Turkey Creek Spring (T14S, R18E, NE1/4 S28 [unsurveyed) in Saguaro Wilderness.



Figure 1a. Location of Turkey Creek Spring (T14S, R18E, NE 1/4 S28 [unsurveyed]) in Saguaro Wilderness.

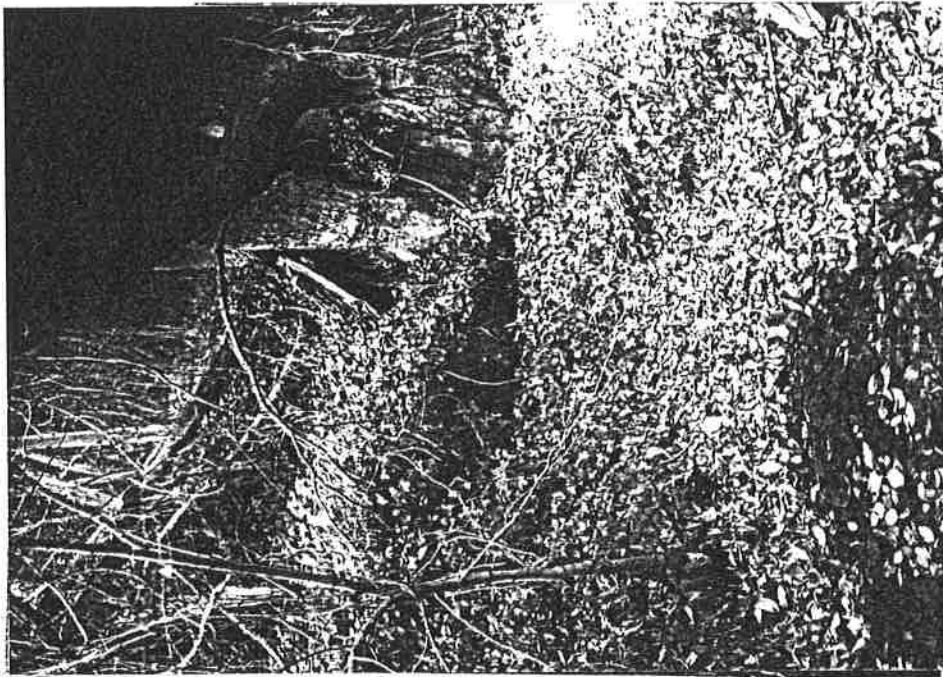


Figure 1b. Turkey Creek Spring (T14S, R18E, NE 1/4 S28 [unsurveyed]) in Saguaro Wilderness.

Proclamation Number 2031 on March 1, 1933 to promote the public interest "...by reserving as much land as may be necessary for the proper protection..." of lands that "...are of outstanding scientific interest because of the exceptional growth thereon of various species of cacti, including the so-called giant cactus..." This proclamation also stated that "...the national monument hereby established shall be the dominant reservation, and any use of the land which interferes with the preservation or protection as a national monument is hereby forbidden." The Monument was subsequently enlarged by Presidential Proclamation No 3439 of November 15, 1961. Seventy-one thousand four hundred acres of Saguaro National Monument were designated as wilderness under Public Law 94-526 of October 20, 1976.

The majority of the land included in the Monument had been under the supervision of the U. S. Forest Service since the withdrawal of the land for a Forest Reserve on October 2, 1905. The Forest Reserve was changed to a National Forest on March 4, 1907 and the name changed to Coronado National Forest with its establishment on July 2, 1908.

There are several documents relating to spring development and water rights in Saguaro National Monument extending back to 1951. A memorandum (NPS,1951a), to the Regional Director from Regional Counsel, discussed legal issues related to the proposed development of seven springs in Saguaro National Monument. Assumptions made in this memorandum suggest that "...none of the springs in question is tributary to a stream which flows outside the monument boundary." and "If that assumption is correct, the grazing permittees do not need to make formal appropriations of water." Further discussions revealed that "Although we feel that the principal justification is the need of water for wildlife..." and that Arizona law recognizes use by wildlife as a beneficial use, the National Park Service "...would be in a stronger position in case of future controversy over water rights, if we were to adopt the purpose of making additional water available both for stock and wildlife..." Another memorandum (NPS,1951b) lists the seven springs, but Turkey Creek Spring (a.k.a. Blackberry Spring) is not one of them. In another memorandum (NPS,1953a) it is reported that a check with the State Engineer found no water rights claims for any of the seven springs proposed for development. These springs were described again and legal descriptions given in another memorandum (NPS,1953b). This description of water systems (artificial structures), by which the Park Service claims water, does not list the spring in Turkey Creek.

Maps accompanying another memorandum (NPS,1956a) showed the Happy Valley Allotment as "(OPEN)" and that there was "No Record of Permit, Estimated Capacity 60 cattle 12-months 720 AUM." A suggestion made for the Superintendent of Saguaro was that he "Investigate the possibility of abolishing the Happy Valley

Allotment which has a record of non-use (NPS,1956b)." The Happy Valley Allotment is again referenced in a memorandum (NPS,1956c) on Grazing-Saguaro. In this document "...two "off and on" permits which would be difficult to abolish..." were discussed.

A Memorandum of Agreement between the National Park Service and the U. S. Forest Service (NPS/USFS,1956) stated that the Forest Service would "...issue new ten-year grazing permits to present permittees in 1956...and will continue to receive and account for grazing within the boundaries of the National Park Service lands." This agreement signed by the Forest Supervisor and the Monument Superintendent also stated that there would be "...no transfers of grazing permits made without the concurrence of the National Park Service." Echoing the terms of the agreement, on March 9, 1958 the Coronado National Forest Supervisor in reference to COOPERATION-U. S. Park Service stated that "...it was agreed that Rangers should secure approval from the local Park Service official before constructing or permitting construction of range improvements on National Monument lands (USFS;1958)".

On April 4, 1968 in a memorandum (NPS,1968) a summary of grazing permits is given "In view of the pending wilderness hearing scheduled for the fall of 1968..." and "...to make sure we are all fully aware of the total grazing commitment involving the Monument area." The Happy Valley allotment is shown as being under USFS Permit #05-00377.

A Special Use Permit (NPS,1974a) was issued to Betty Sue and D. Malcolm MacKenzie to replace USFS 05-00377. Under CONDITIONS OF PERMIT it is stated:

8. Water Rights.-- Water rights will be perfected, when necessary, by the United States in its own name for water developed or used in connection with this permit. The permittee will furnish to the United States such information as is necessary for perfection, including statutory fees, and for management and protection of the resource (SAGU-2-74).

Another document, entitled a SUMMARY OF GRAZING, lists the allotment as having extended from "196? to present (NPS,1974b)." This summary explains that the MacKenzies' Special Use Permit terminated on December 31, 1975 and will not be renewed.

On July 23, 1976 the Superintendent of Saguaro sent a letter (NPS,1976a) to Mr. Malcolm MacKenzie apologizing for the delay in answering MacKenzie's letter. In his letter (MacKenzie,1976) reference is made to "Blackberry Spring" in the Turkey Creek drainage. MacKenzie discussed the use of this spring for watering cattle grazed in the Happy Valley Allotment and also wrote "You stated that we would be able to continue using this

after the park is fenced off." MacKenzie then requested a statement in writing from NPS that this use would continue.

In a memorandum (NPS,1976b) to the General Superintendent (SOAR) the subject of water resource development for grazing permittees was discussed. In this memorandum a statement was made that "It (Turkey Creek Spring) has been a part of USFS Grazing allotment permit." A request was made that Turtle Spring next to the Barney Allotment be developed wherein Mr. Barney "...be allowed to continue using the water from this spring..." and "...construct a pipeline from the spring to a tank on Forest land." Mention was also made of discussions with USFS personnel who felt that these springs were "...essential for good management on the adjacent allotments..." and that "Due to long-term usage of both springs for grazing purposes it is difficult to justify to the USFS and the ranchers that the water supply should be cut-off." In summation questions were posed about long-term legal implications of continued usage; if allowed to continue what would the political implications be to future managers who try to stop such use; does the monument have the right to obligate water; and what are any rights of users based on long-term use. The last question posed was "Assuming we do allow them to continue use of the water, should we issue a Special Use Permit on a limited basis or is there some other form that would be better?"

Discussions in a solicitor's opinion (NPS,1977a) offered legal clarification of the above questions. It was concluded that as of August 10, 1933, the effective date of Executive Order 6166, that any national forest laws that might have been applicable to Saguaro ceased to be applicable as of this date. Further statements conclude that "In view of the fact that these graziers do not now hold, and cannot acquire, any water rights, the only way they can be allowed to use the water in these springs is if NPS is authorized to allow them to use the water. We do not believe such authority exists here." The opinion is given later that it is "...believe(d) that NPS has certain limited authority to allow use of the water within an area for stock watering. However, this authority is limited to instances where NPS authorizes the grazing of livestock on its land." In summary it is stated that "...since NPS does not plan to authorize these individuals to graze their livestock in the Monument, this authority is not applicable..." and "...we do not believe NPS can allow these graziers to use these springs."

In a letter (NPS,1977b) the Superintendent informed Forest Service officials that he "...cannot grant your request to maintain the Turkey Creek water and pipeline or Turtle Springs as viable water supplies for the Happy Valley and Barney Allotments." As a clarification of his April 8, 1977 letter, the Superintendent cited the specific statutory authority for disposing of water by the National Park Service (NPS,1977c),

which is a summation of the remarks made in the solicitor's opinion cited above.

Discussions among Coronado National Forest personnel (USFS,1977a) point out the need for the springs for the effective use of the allotments and also questioned the authority of the Superintendent to cancel use if he did not have the authority to permit use. The Forest Service considered that two alternatives existed with regard to the termination of use of the Turkey Creek pipeline (USFS,1977b). The first would be to attempt to replace the Turkey Creek Spring source (referred to as Turkey Spring in the memorandum) and secondly reduce the permit by the amount of AUM's which could be grazed in the area watered by this spring. The U. S. Forest Service, in a letter to the Happy Valley Permittee (USFS,1977c), referenced the fact that the National Park Service would not authorize use of the water from Turkey Creek and that it was the intention of the Forest Service, if on appeal use is denied, to "...pursue the possibility of a pipeline from the farmstead up Turkey Creek." It was further stated that the latter "...may be deemed necessary as supplemental water even if the Turkey Creek water use is approved."

In the management plan for the Happy Valley allotment it is pointed out that:

Potential

It is possible that Turkey Creek pasture will need an additional water development in order to sustain the livestock during May and June. This is especially true as the Park Service has terminated use of the Turkey Creek pipeline and water. Water is available in the creeks for usually all but the driest months and in the several springs. A pipeline from the farm to SE 1/4 of Section 34 should be installed as soon as funds permit and the necessary permission can be obtained (USFS;1977).

The latest plan for the area (USFS;1987) contains some inaccuracies when describing this allotment when it is stated that "Elevations range from 4000 feet to 8500 feet." after locating the allotment in the Rincon Mountains, Pima County. The only elevation that reaches the height of 8500 feet within the Rincons is in the wilderness area of Saguaro National Monument where no grazing has been permitted since December 31, 1975 and which is no longer a part of the Happy Valley allotment. In the DISTRIBUTION AIDS TO BE EMPLOYED section of this management plan is the statement that:

B. Water. The Happy Valley Allotment has 25 dependable water sources. In regard to performance and dependability, six other additional waters are seasonally highly variable. Hidden Springs water storage and two wells located on

private land can be shut off periodically. These developments are connected to several troughs located on the allotment. The Happy Valley Allotment contains two dirt tanks, two wells, three temporary springs, eight developed springs, two storage tanks, 24 troughs, and three and one-half miles of pipeline (USFS;1987).

Nowhere in this latest management plan is the Turkey Creek Spring or pipeline mentioned, although such could possibly be included in the totals for springs and pipelines.

As a result of the Case Incident Report previously cited, the Superintendent sent a letter to the current grazing permittee on the Happy Valley Allotment (NPS,1989) stating that "...any action you take to make repairs, improvements or alterations to the water line will require written permission from the National Park Service." In answer the permittee (Weed,1989) made the National Park Service aware that he had filed a water rights claim in 1978 on the Turkey Creek Spring. Included with the letter was a copy of the claim and a map showing the location of the spring.

A meeting between U. S. Forest Service and National Park Service personnel was held on December 4, 1989 (USFS,1989). It was agreed at this meeting that:

1. The Forest Service would assess whether there is an alternate water source outside of Saguaro National Monument that is feasible to develop; and assess the impact of not having water for this part of the grazing allotment.
2. If no alternative is found the Forest Service would request a right-of-way for the pipeline.
3. The National Park Service would assess the environmental impacts of the use of the spring and pipeline and assess whether such use is consistent with the purpose for which the Monument was created.
4. Until the problem of this use is resolved, continued use of the water by the permittee will be allowed, but no additional work will be done on the spring or pipeline until there is a resolution.

ALTERNATIVES

A. No Action. This alternative offers no solution to the current problem of water use in Turkey Creek. In fact it leaves the matter in abeyance, unresolved as has been the case since the creation of the Monument in 1933 and more importantly since 1977 when opinions were forthcoming on how the matter could be resolved.

B. Grant a Right-of-Way for the Pipeline from Turkey Creek Spring/Issue a Special Use Permit/Prepare an Interagency Agreement. It appears that there has been de facto trespass in the use of this spring since 1977 when the Superintendent of Saguaro National Monument stated he could not authorize the use of the water and pipeline in Turkey Creek. The objective of this alternative is to continue the status quo, but legally by the granting of a Right-of-Way to the U. S. Forest Service for the current pipeline and possibly issuing a Special Use Permit for a stock watering development. The National Park Service can issue such a right-of-way under 16 USC 5 which grants such authority to the Director of the National Park Service. The Superintendent, under 36 CFR, is authorized to issue permits for special park uses that:

...shall be consistent with applicable legislation, Federal regulations and administrative policies, and based upon a determination that public health and safety, environmental or scenic values, natural or cultural resources, scientific research, implementation of management responsibilities, proper allocation and use of facilities, or the avoidance of conflict among visitor use activities will not be adversely impacted (Part 1.6).

Since the use of water is to be allowed outside the Monument, but on land controlled by a sister agency, then an Interagency Agreement would most probably be the appropriate vehicle to establish cooperative or mutual assistance relationships and in which the transfer of funds will occur to accommodate "sale" of the water. While Congress has delegated to the Secretary of the Interior limited authority to allow the use of water in areas of the national park system, the only specific statutory authority for disposing of water is 16 USC 1a-2(e) (NPS,1977a).

National Park Service Management Policies (NPS;1988) on water use management, conservation and in connection with grazing refer to uses within the parks. These policies also state that the Service may enter into contracts to sell water for public accommodations within the immediate vicinity of the park as authorized under 16 U.S.C. 1a-2(e). As previously stated the National Park Service has limited authority to allow use of water within an area for stock watering where grazing of livestock is allowed on land managed by the Service, since grazing is not allowed in Saguaro there is no other existing authority which would authorize the use of these springs for stock watering (NPS,1977a).

The Service's management policies (NPS,1988) also state:

Rights-of-Way

Existing rights-of-way that have been included in wilderness

should be phased out where practicable. Where it is not practicable, rights-of-way subject to NPS administrative control may be renewed under conditions outlined in the park's wilderness management plan that protect wilderness character and resources and limit the use of motorized or mechanical equipment. The National Park Service will not issue any new rights-of-way or widen or extend any existing rights-of-way in wilderness (6:9).

It would appear from the above statement that policies negate the issuance of rights-of-way in wilderness where no right-of-way was in place at the time the wilderness was created.

Other considerations for granting such uses are found in guidelines (NPS-53,1986). Such a use does not relate to the legislative purpose for which the Monument was established nor does the proposed activity have value to the park itself. While it can be argued that this request needs special consideration because of the potentially adverse effects as concerns a permittee with grazing rights on Forest Service land, but the long-term effects on park wilderness resources have to be determined also.

Section 1a-1 of Title 16 of the United States Code places affirmative obligations on the National Park Service to exercise its authority in a manner that will protect against the derogation of park values. It is important to note that derogation of values goes beyond physical resources. The derogation of the visitor's experience may be considered a derogation of values. The purpose and values referred to in the above statute are the purposes and values identified in the Organic Act, the enabling legislation establishing the Monument, the Wilderness Act, NEPA compliance and any other legislation that may apply to a particular area.

This option is not a preferred one when considering whether this use is authorized, which it apparently is not. Whether a Special Use Permit is the appropriate vehicle to authorize such use is questionable since there is apparently no legal authorization and since management policies negate the issuance of new rights-of-way in wilderness. Derogation of park values appears to be the case when one considers that water is park resource intended for use by native species, that a pipeline disrupts the natural scene and that Service policies are negative toward the placement of rights-of-way in wilderness.

Should it be determined that the authority for this use does lie with the Secretary and that an Interagency Agreement is the appropriate vehicle, the last factor to be considered is NEPA requirements. It is evident that this proposed use is not categorically excluded from the NEPA process (NPS-12,1982), hence the preparation of this environmental assessment. Whether this

alternative requires a FONSI or whether it constitutes a major federal action significantly affecting the human environment, thus requiring an NOI prior to the preparation of an Environmental Impact Statement, must be considered very carefully. Before a FONSI is prepared, the scoping process could be invoked to assure that all environmental consequences of this action are analyzed and to determine whether or the NOI is the proper document to prepare (CEO,1981).

C. Reaffirm the Superintendent's Decision of 1977. The previous citation of this decision (NPS,1977c) indicates that the Superintendent relied on legal opinions and exercised his permitting authority in denying the use of the water and pipeline in Turkey Creek. The Forest Service in turn produced documents affirming that they understood that such use would not be permitted and, consequently, it would appear that there has been trespass, in legislated wilderness, since the Superintendent's decision of 1977. Legal counsel has advised the Service that there is no statutory authority to allow such use and management policies specifically state that the Service will not issue rights-of-way in wilderness.

Based on the information presented in this assessment it is the recommendation that this alternative (Alternative C) be selected as the preferred alternative and that a FONSI be prepared affirming this preference.

AFFECTED ENVIRONMENT

Any of the alternatives listed affect an area in the Saguaro Wilderness of the Rincon Mountain District of Saguaro National Monument. This area which is in the Turkey Creek Drainage is found in T14S, R18E, NE 1/4 S28 (unsurveyed). Typically this area is a transition zone between grassland and woodland vegetative communities. The Turkey Creek Trail passes to the north of the spring and drainage so access has to be cross-country or on non-designated trails. The pipeline traverses the drainage partway to the Monument boundary (Figure 2) and also crosses wilderness outside the drainage. Damage has been done to vegetation during pipeline maintenance (Figure 3), erosion has occurred (Figure 4) and should this line remain, maintenance would require continued resource impacts and derogation of wilderness values.

ENVIRONMENTAL IMPACT

Environmental impacts resulting from the preferred alternative (Alternative C) are minimal to vegetation, wildlife, soils, cultural resources and noise and air quality. Removing the existing pipeline, restoring disturbed areas and rehabilitating

Figures 2. Exposed pipeline in Turkey Creek Area of Saguaro
Wilderness.

Figure 2a. Exposed pipeline in Turkey Creek Drainage,
Saguaro Wilderness

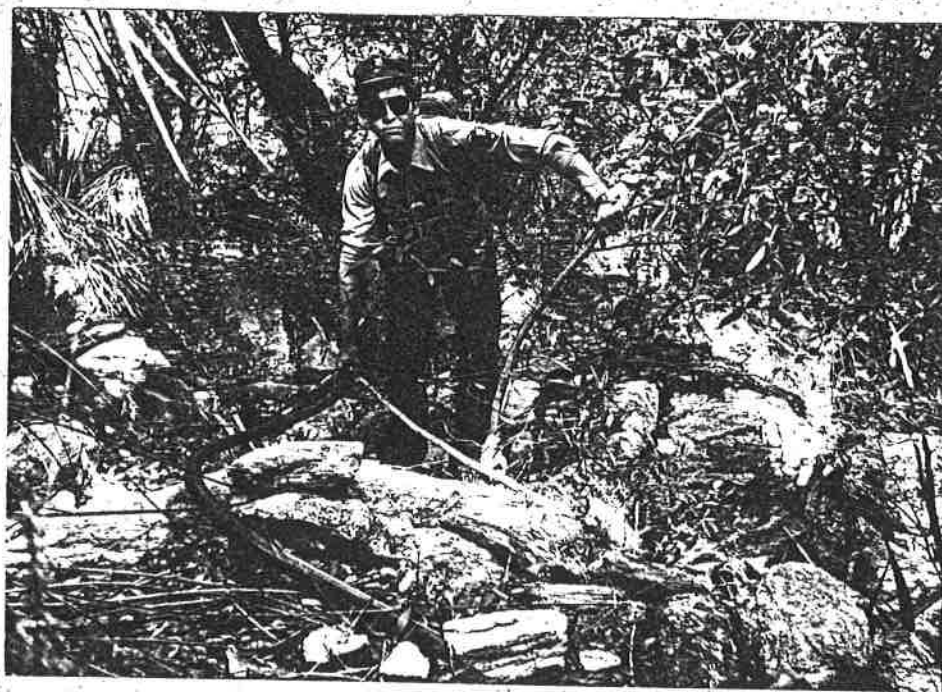
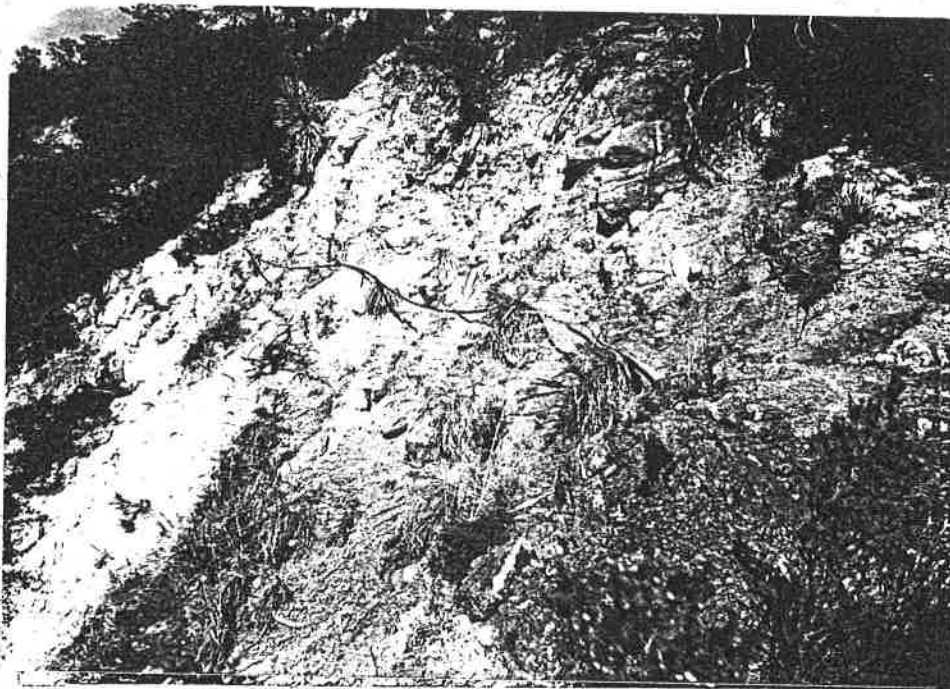


Figure 2b. Exposed pipeline in Turkey Creek
Area of Saguaro Wilderness

Figure 3. Resource damage to Saguaro Wilderness in Turkey Creek Area.

Figure 2a. Trail blazed for pipeline maintenance.

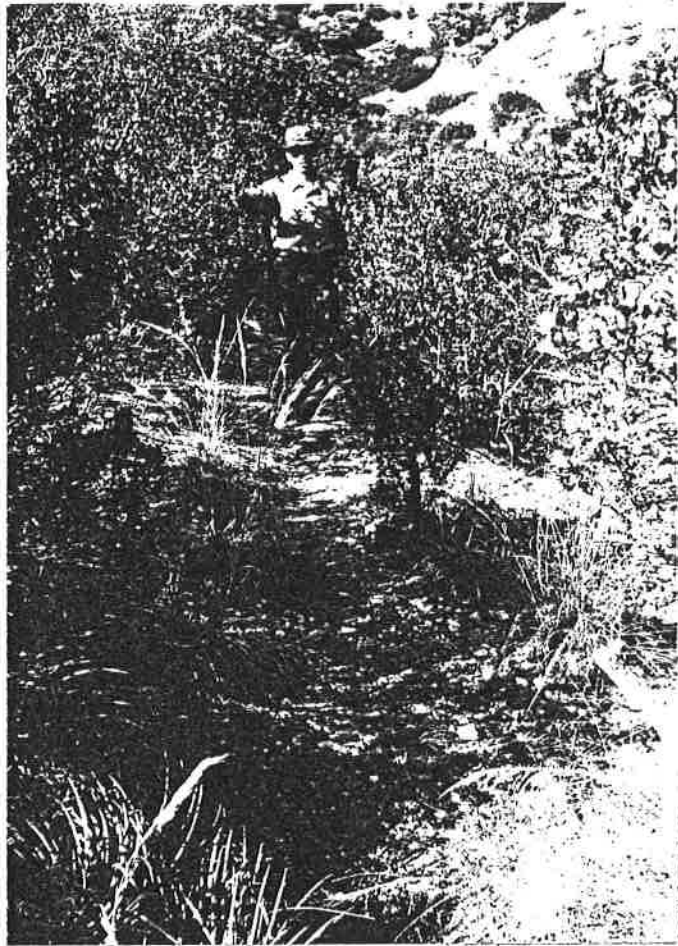


Figure 2b. Manzanita damaged by effort to maintain pipeline through brushing.

Figure 4. Soil erosion resulting from buried pipeline in Turkey Creek Area of Saguaro Wilderness.



Figure 4. Soil erosion resulting from
buried pipeline in Turkey Creek
Area, Saguro Wilderness

the spring development would mean that wilderness values would be restored, with time, and the wilderness experience of the visitor would not be derogated. The attached matrix gives a complete rundown of impact comparisons for the four alternatives discussed.

There are no known cultural resources in the area, but before any action is undertaken, i.e., rehabilitation or issuance of a right-of-way, the drainage and pipeline route will have to be surveyed by trained personnel. No known threatened or endangered species are known to use the area. Rehabilitation of the spring development will in no way impact wildlife or plant species, as the intent is to return to it as original a condition as far as can be determined.

CONSULTATION AND COORDINATION

Personnel

The Backcountry District Ranger discovered and reported the spring development and pipeline. He has prepared a report of the incident, located the spring on a topographic map and taken photographs of the area to record existing conditions and delineate impacts. Consultations have been held with U. S. Forest Service personnel concerning the history of this use. Such consultations will continue until the matter is resolved and, if deemed necessary, on a regular basis to prevent future conflicts and resolve existing misinterpretations of National Park Service policies and responsibilities in protecting the resource.

Before any rehabilitation work or any permanent use of the pipeline and spring is allowed, an archeological survey of the area will be conducted. Further consultations will be requested if any objects of an archeological or historical nature are revealed during field actions to complete the selected alternative. If any objects of an archeological or historical nature are revealed during this project, further consultations will be requested from Regional/Park Archeologists.

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