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Overcoming Conflicts with the Endangered Species Act: Building Tribal Endangered Species Management Capacity

A Report to the White Mountain Apache Tribe

by

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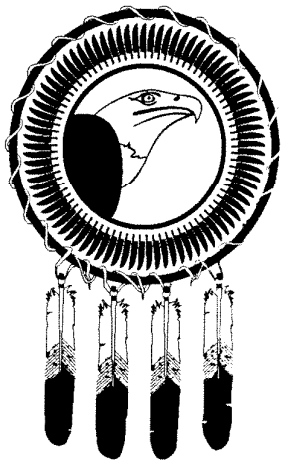

HARVARD PROJECT ON
AMERICAN INDIAN ECONOMIC DEVELOPMENT

EXECUTIVE SUMMARY

I. The Problem: Endangered Species and Tribal Sovereignty

The White Mountain Apache Tribe (WMAT), located on the 1.68 million acre Fort Apache Indian Reservation in east central Arizona, has conserved and protected its homeland for generations. As a result, the reservation contains some of the last remaining forest and riparian habitat left in the state and has become a haven for many endangered species. Currently 31 listed or candidate threatened and endangered species are known to be on the reservation. Although control over natural resource use has not been adversely affected by previous threatened and endangered (T&E) species, the recent listing of the loach minnow, as well as the proposed listing of the Arizona willow and the Mexican spotted owl, along with critical habitat on the reservation, lead to serious concerns that Tribal sovereignty could be compromised due to US Fish and Wildlife Service (FWS) enforcement of the Endangered Species Act (ESA).

T&E species protection could severely limit many Tribal economic and development activities. Protection of the loach minnow prevented a water treatment plant for the town of Whiteriver; the Arizona willow threatens to curtail ski operations at Sunrise Ski Resort; and the Mexican spotted owl could force the closing of FATCO, which currently supplies over 73% of the Tribe's self-generated revenue and over 500 jobs. Indeed, current or potential T&E species could restrict nearly every Tribal enterprise on the reservation. Furthermore, recent Tribal strategies to limit the flow of information regarding T&E species have not successfully protected the Tribe from federal restrictions under the ESA. The threat to the Tribe's sovereignty and future economic development requires that the Tribe develop a more effective strategy for managing T&E species conflicts.

Knowledge is Power

Other tribes have found that in order to maintain sovereignty and decision-making control over natural resource use, a strong T&E species management capacity works in their favor—in other words, knowledge is power. The Yakima, Salish and Kootenai, and Navajo Tribes have actively collected data and are now regarded as authorities on T&E species in their region. They know which species live on their reservation and which do not, what their needs are, and what the likely effects are of Tribal development activities. They can build mitigation strategies into their proposed actions or even develop resources in such a way that species habitat is enhanced. In addition, through responsible T&E species management, these Tribes have gained essential credibility in the eyes of FWS.

II. The Task: Building T&E Species Management Capability

The central recommendation of this report is to increase the White Mountain Apache Tribe's T&E species management capacity. The presence of T&E species will almost certainly require modification to some Tribal activities and development plans. However, in order to maintain sovereignty the Tribe, rather than FWS, should make the modifications. By creating the capacity to gather sufficient knowledge of species and their habitat requirements, the WMAT could more readily design projects to accomplish the dual goals of maximum economic benefit to the Tribe and conservation of species and habitat. In other words, increased T&E species management capability is the key to sovereignty over natural resource use decisions.

Currently the Tribe is hampered in its ability to effectively manage T&E species by three constraints:

- **Lack of data:** surveys and inventories to determine quantity, health, population trends, and habitat requirements of T&E species.
- **Inadequate capacity:** personnel, technical expertise, and designation of responsibility.
- **Recent loss of credibility regarding T&E species protection:** Because of the Tribe's recent refusal to allow surveys for loach minnow, and Mexican spotted owl, some federal officials doubt that the Tribe can be trusted to adequately protect T&E species as required under the ESA.

Components of an Improved T&E species Management System

Overcoming the above constraints is the first step toward preserving sovereignty over Tribal natural resource management. Simply put,

> ***The Tribe must develop the internal capacity to collect and manage data on T&E species and their habitat, and use that data to make responsible natural resource management decisions.***

If projects are designed such that T&E species or their habitat are not adversely affected, there is no reason for FWS or other government agencies to interfere.

The major components of T&E species management are:

- **Data Collection:** field surveys by qualified observers.
- **Data Management:** categorizing the data collected and making it useful to others.
- **Data Use:** biological assessments, mitigation measures and conservation plans.

Building Capacity and Credibility

The Tribe can increase its credibility as a responsible manager of T&E species by increasing its T&E species management capacity and taking positive actions to conserve and protect listed species and their habitats. By taking the following steps, the Tribe will not only increase its ability to develop its resources for the benefit of Tribal members, but will also allow the Tribe to better incorporate its own Apache values into resource management:

- **Assign responsibility for T&E species management:** A trained biologist who is familiar with the reservation should be assigned responsibility to coordinate T&E species management activities.
- **Train Tribal members as biologists and technicians** (see Appendix N).
- **Institute Tribal environmental review**: Assess the likely affects of development projects on species and habitat and incorporate conservation and mitigation strategies into project design.
- **Make and enforce Tribal natural resource policy.**
- **Inform Tribal members and visitors about the needs of T&E species.**

III. The Solution: Options for Locating Future T&E Species Management Capability

The Tribe has many choices with regard to future T&E species management capability. Below I consider three of the most likely options.

- **Option I: Make no change:** A decision to do nothing leaves the Tribe with the deficiencies detailed in Section II: lack of data, inadequate capacity, and loss of credibility. The consequences of not improving the Tribe's T&E species management capacity can be broken down into the following categories:
    - Reactive rather than pro-active;
    - Vulnerable to restrictions by FWS;
    - Reduced sovereignty.
- **Option II: Create a T&E species management unit within Game and Fish:** This option has the benefits of 1) maintaining the existing Tribal structure, 2) having a consistent mission between the two sections, and 3) precedent of other similar wildlife management institutions. Arguments against this option include 1) potential conflict of

interest, and 2) Inter-agency conflicts. The arguments against this option are of minimal concern in practice.

- **Option III: Establish a Freestanding T&E Species Management Unit:** This option has the benefits of making an" Office of Endangered Species" 1) independent rather than under Game and Fish, 2) on an equal level with Game and Fish and other Tribal agencies, and 3) easily incorporated into a future Division of Natural Resources. However, this option has the negative effects of 1) duplicating the existing technical capabilities of Game and Fish, 2) being potentially ineffective, and 3) potentially loosing its mandate for T&E species protection. The negative sides of this option appear significant. Thus, this option is less preferred than Option II.

IV. Taking Action: An Implementation Strategy

Building the capacity to effectively manage T&E species should be accomplished in stages. The Tribe must focus on the immediate problems (i.e., the Arizona willow listing and spotted owl critical habitat designation) while laying the foundation for enhancing its sovereignty over natural resource use decisions. I suggest a process for developing this capacity that involves 1) the creation process of choosing a director, establishing an office, and creating a coordinating task force, 2) focussing on immediate needs, and 3) building on success. See the following chart (Figure A) for detail.

V. Conclusion

The key to maintaining sovereignty in this case is making decisions that do not harm T&E species or their habitats. Information will assist the Tribe in choosing among projects, choosing among sites, and designing mitigation measures. However, this will not resolve all conflicts between species protection and Tribal development. Some conflicts may prove irreconcilable. However, improved information and technical capacity will arm the Tribe with the best chance it has to manage its homeland in an Apache way. In this way the White Mountain Apache Tribe can provide the best development possible to provide for its Apache people while continuing to respect and preserve the land that is its home.

IMPLEMENTING T&E SPECIES MANAGEMENT CAPABILITY

1	2	3
CREATION	**IMMEDIATE NEEDS**	**BUILD ON SUCCESS**
Designate Responsibility • Appoint Director - Biologist or Ecologist - Familiar with reservation **Establish Office:** • Location - Game and Fish? - Tribal Government? - Elsewhere? • Role - Advisory? - Regulatory? - Planning? - Monitoring? • Authority - Equal to other Agencies? - Subordinate to other Agencies? **Convene Inter-Agency Coordinating Task Force**	**Quick Needs Assessment** • Determine work that needs to be done **Prepare Strategy** • Prioritize work **Hire and Train Staff** • Biologists • Technicians • Data Manager **Survey for Priority Species** • Collect data on: - Arizona Willow - Mexican Spotted Owl **Develop Conservation & Mgmt Plans for Priority Species** • Developed by biologists **Publicize Tribe's Conservation Activities** • Recovery of Bald Eagle and Apache Trout • Reduced Annual Allowable Cut • Current Management Plans **Find funding**	**Monitor and Protect** • Conduct surveys • Map habitat **Visit other Tribal T&E Species Units** • Navaho • Yakima • Salish and Kootenai **Research** **Develop Tribal T&E species policy** • Conservation and recovery plans • Protocol for Tribal screening of projects • Tribal wilderness code **Education and Training**

A

Figure A

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Abbreviations

BIA	Bureau of Indian Affairs
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FATCO	Fort Apache Timber Company
FWS	US Fish and Wildlife Service
GIS	Geographic Information System
IHS	Indian Health Service
IRMP	Integrated Resource Management Plan
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
T&E Species	Threatened and Endangered Species
USFWS	US Fish and Wildlife Service
WMAT	White Mountain Apache Tribe

I. The Problem:
Endangered Species and Tribal Sovereignty

The White Mountain Apache Tribe is located on the 1.68 million acre Fort Apache Indian Reservation in east central Arizona. The reservation is rich in natural resources—especially timber and wildlife—which the Tribe has conserved and protected for generations. Although its economy is heavily natural resource based, the Tribe has struck a delicate balance between the need for jobs and economic development on the one hand, and natural resource conservation on the other.

Indeed, because of the Tribe's responsible management of its homeland, the reservation has become a haven for threatened and endangered species. There are now 31 threatened, endangered, proposed or candidate species known to be living on the reservation (see Appendix C), each requiring special protection measures to ensure survival and recovery. Although Tribal economic development has not been adversely affected by previous threatened and endangered (T&E) species, a recent conflict with the loach minnow, as well as the proposed listing of the Arizona willow and the Mexican spotted owl, along with critical habitat on the reservation, lead to serious concerns that current revenue generating activities and future economic development may be restricted in favor of T&E species protection. Due to the increasingly invasive reach of the US Fish and Wildlife Service (FWS) in its attempts to protect T&E species, the White Mountain Apache Tribe (WMAT) is currently faced with the loss of sovereignty over its natural resource development decisions.

The threat to the Tribe's sovereignty and future economic development requires that the Tribe develop a more effective strategy for managing T&E species conflicts. The purpose of this report is to guide the Tribe in understanding the constraints it faces, the task it must undertake, and the range of options it has for improving T&E species management capability. T&E species could severely limit many Tribal economic activities; recent Tribal strategies to limit the flow of information have not successfully protected the Tribe from federal restrictions under the Endangered Species Act (ESA). In order to maintain decision-making control over natural resource use a preferred strategy is to develop a strong T&E species management capacity. Subsequent sections of this report will analyze the components of an improved T&E species management capability and present options and an implementation strategy for the Tribe to achieve this capability and protect its sovereignty over natural resource use decisions.

Current T&E Species Conflicts

The case of the loach minnow was the first to make the Tribe aware of the potential restrictions T&E species could create. In November of 1991, Indian Health Service (IHS) proposed to build a water treatment plant for the town of Whiteriver. The plan would have diverted water from the North Fork of the White River to supply municipal and industrial water needs. However, the Fish and Wildlife Service (FWS) determined that the proposed level of water diversion would adversely affect the loach minnow, a federally listed threatened species, and the project was stopped. No alternatives to the project have yet been found. Because the loach minnow inhabits rivers flowing in and around Whiteriver, it is now feared that the ESA could prevent the Tribe from ever developing an economical water supply for the town.

The recent proposed listing of two species—the Mexican spotted owl and the Arizona willow—foreshadows the future outlook for the Tribe in terms of both increasing encounters with T&E species and the high potential for economic losses. The largest known concentration of Mexican spotted owls occurs in a region that encompasses the Fort Apache Reservation and five surrounding national forests. If the owl is listed, Tribal forests would be prime critical habitat and thus subject to severe harvesting restrictions. Some estimates suggest upwards of 75% of the forest would be set aside for owl habitat[1], causing severe economic hardship for the Tribe.

Tribal timber operations are the core economic activity on the reservation and the most profitable tribal enterprise. Timber supplies 73.1% of the Tribe's self-generated revenue[2] and over 500 Tribal jobs. The entire operation could be severely reduced if the Tribe is forced to set aside huge tracts of forest land to maintain suitable habitat for the spotted owl. According to a recent study, losses could range from $10.2 million to $30.8 million.[3]

In addition, the proposed listing of the Arizona willow has the potential to substantially restrict the second most profitable industry on the reservation--Sunrise Ski Resort. Sunrise revenues account for 12.2% of the Tribe's General Government fund.[4] The Arizona willow is only known to exist on the Fort Apache Indian Reservation and in the adjacent Apache-Sitgreaves National Forest. Plants have been found on the Sunrise ski slopes, as well as in the parking lot. Protection of this plant restricts slope restoration activities and could force the partial closure of the ski operation or prevent it's ability to expand.

Although the loach minnow, spotted owl, and Arizona willow encompass the current threat from enforcement of the Endangered Species Act, they are by no means the extent of it. There are twenty one more candidate species known to exist on the reservation which have yet to be acted upon by the FWS. The Goodding onion, for example, which could adversely impact the Tribe's trophy elk hunt and its cattle operation, is expected to be listed soon. In fact, current or potential T&E species could curtail nearly every tribal enterprise on the reservation. The two most profitable--timber and Sunrise Ski Resort--have already been mentioned. But the threat includes

Figure 1

Partial List of Tribal Activities

and Species Which Could Affect Them

Tribal Enterprises and Development	Species That Could Affect Activities
Timber	Mexican Spotted Owl, Loach Minnow, Apache Trout, Southwestern Willow Flycatcher; Goodding Onion
Sunrise Ski Resort	Arizona Willow, Goodding Onion, Apache Trout
Elk Hunt	Arizona Willow, Mexican Spotted Owl, Goodding Onion, Southwestern Willow Flycatcher,
Municipal Water Supply	Loach Minnow
Cattle Grazing	Goodding Onion, White Mountains paintbrush, Arizona Willow Flycatcher, Apache Trout, Razorback Sucker
Road Construction	Loach Minnow, Apache Trout, Goodding Onion

the elk hunt, cattle grazing, agriculture, fishing and camping (see Figure 1). Nearly every major revenue generating activity could be severely affected by T&E species.

In addition, the FWS is being pressed to increase the level of research and speed of listing for T&E species; that in turn means more encounters with T&E species for the Tribe. With more than ninety percent of Arizona's riparian area destroyed since the mid-1800's[5], Arizona's T&E species populations are likely to show up in the remaining riparian areas—much of which are on the Tribe's land. The bottom line is that the T&E species problem is not about to go away. In fact, it is likely to get worse. As more species are found, the greater will be the challenge for the Tribe to balance conservation and development goals, maintain its revenue base, and provide employment for Tribal members.

WMAT's Initial Strategy: Restrict the Flow of Information

When the WMAT learned that protection of T&E species could prevent the Tribe from developing its resources, it adopted the strategy of putting up barriers and restricting the flow of information to federal agencies. The Tribal Council stopped all internal surveys of non-harvestable plants and wildlife, ordered the BIA not to share information with the government, and prevented state and federal officials from coming on the reservation to do surveys. Even unrelated projects such as bald eagle restoration activities in cooperation with the FWS were halted. This created animosity and distrust toward the Tribe by the FWS. The Tribe seems to have believed that without information, the FWS would have no basis for imposing regulations or restrictions on Tribal development activity.

Unfortunately, just the opposite is true. The ESA requires the FWS to act on the basis of "available data"; it says nothing about the sufficiency of that data. In fact, insufficient data forces FWS to look at the worst case scenario and err conservatively toward protection of the species. In the case of the loach minnow/IHS water diversion project on the north fork of the White River, the lack of data on the White River loach minnow population may have forced a jeopardy opinion because there was no information on the population's density, health, growth trends or likely reaction to reduced water flow.[6] As this example illustrates, the lack of data can often work against the Tribe.

An Alternative Strategy: Knowledge is Power

In contrast, a number of tribes have found that with T&E species issues, knowledge is power. Many tribes including the Yakima, Navajo, and Salish and Kootenai have developed strong T&E species management capability. They have hired biologists, conducted surveys to inventory and monitor species, mapped habitat use, performed research on habitat requirements,

and compiled sufficient data to be regarded as authorities on T&E species in their regions. They are respected as knowledgeable and their opinions are trusted. When timber harvests or other actions are planned, mitigation measures to reduce adverse impacts to T&E species are generally built into the proposal. Indeed, the FWS relies on data collected by the tribes when developing its biological opinion. Says Eric Hanson, Yakima biologist, "By having the data, we were able to get out ahead of the curve. We were able to be pro-active rather than reactive."[7]

There are two key lessons from these Tribes' experience. The first is that by compiling data, the Tribes are aware of what species live on the reservation, what their needs are, and what the likely effects are of Tribal development activities. They can build mitigation strategies into their proposed actions, or even develop resources in such a way that species habitat is enhanced.

The second lesson is perhaps even more important. By planning timber sales and other development *with the needs of the T&E species in mind*, these Tribes have established themselves as responsible and trustworthy managers of their natural resources. They have gained essential credibility in the eyes of the FWS.

The Yakima Experience

The experience of the Yakima in eastern Washington is particularly relevant given WMAT's current concerns over the potential impact of Mexican spotted owl protection and critical habitat designation. According to a Yakima biologist, the Tribe was able to avoid critical habitat designation in part because of its ability to argue that based on demonstrated Yakima management activities and capability, the owl would be protected throughout continuing timber operations. As the April 1992 *Draft Recovery Plan for the Northern Spotted Owl* describes,

> "The Yakima Indian Nation has a large, effective fisheries and wildlife staff that reviews all on-reservation activities that may have environmental impacts. Currently, the Yakima Indian Nation employs 14 full-time biologists and wildlife technicians on northern spotted owl inventory, monitoring, and habitat utilization studies. Data from these studies will yield valuable insights into the compatibility of uneven-aged forest management techniques in maintaining spotted owl habitat suitability."[8]

FWS used both the wildlife management capabilities of the Yakima and the value of Yakima's owl and habitat research to justify not designating critical habitat on Indian land.

This is not the entire story, however. According to a FWS official in Washington, the real reasons critical habitat was not designated on Indian land were 1) FWS feared that a legal challenge by Tribes (based on claims of sovereignty and abrogation of Treaty rights) would impede or derail attempts to designate critical habitat elsewhere in the Pacific Northwest, and 2) FWS judged that *in this case* restrictions on Indian land were not necessary to ensure recovery of the species. Because the legal issues were uncertain, and because the owl would recover regardless of what tribes did, the FWS chose to avoid confrontation with tribes and refrain from critical habitat designation on tribal land.

In any case, the result is that when critical habitat was finalized for the northern spotted owl, Yakima and other Indian reservation land[9] was excluded. The FWS used Yakima's natural resource management capability and sovereign status to justify to Congress and environmentalists that such action was appropriate. By waiving critical habitat designation on Indian lands in the Pacific Northwest, the FWS has effectively set a precedent. If tribes can demonstrate strong natural resource management capability and show that species survival is not dependent on tribal actions, they have a better chance of avoiding critical habitat designation on their reservation.

In fact, the Yakima have experienced no reduction in logging activities since the northern spotted owl was listed. Of its 355,196 acres classified as commercial forest available for harvesting, only 100 acres have been set aside for owl habitat (the Yakima had designated about 25% of their forest as "protected" for Tribal purposes prior to the owl listing). Because the Tribe engages in uneven age management rather than clear cutting, selective tree cutting allows for a suitable harvest without adverse impact to the owl.

Indeed, the owl listing has proved to be a financial boon to the Tribe. Timber harvest restrictions elsewhere in the region have sent prices up by 300%, and government money is now available to conduct biological surveys and research. The Yakima recently received a $98,000 grant through a US Forest Service Cooperative Research Project to map the habitat range of owls using radio telemetry surveys. This information will enable the Tribe to better plan its timber harvests while avoiding harm to owl habitat. The Yakima have been able to take advantage of this situation primarily because of their well developed T&E species management capability. While other logging operations in the Pacific Northwest are shutting down, Yakima's is in full operation and profits are shooting through the roof.

The Yakima experience shows how information and natural resource management capability can strengthen sovereignty and provide direct benefits to the Tribe. As WMAT searches for ways to protect its sovereignty in its current conflict over Mexican spotted owl critical habitat listing, this experience could prove particularly useful. Two important similarities exist: first, the Northern spotted owl and the Mexican spotted owl have similar (though not identical) habitat requirements; second, both tribes practice uneven-age timber management, as opposed to even-age management (clear cutting) found on surrounding National Forest lands. For these reasons, it is likely that with sufficient documentation the WMAT could make a convincing case that timber harvesting could continue on the reservation in a modified form without harming the owl's habitat or potential for recovery. A third issue, the potential for recovery of the species without protection on the Fort Apache Indian Reservation, is less certain. However, more research on this issue could strengthen the Tribe's case even further.

In order to understand how to use increased T&E species management capability to the Tribe's advantage, an examination of the Endangered Species Act and its relationship to Tribal development is necessary.

The ESA Process and Tribal Development Activity

The purpose of the Endangered Species Act (ESA) is to prevent extinction through the protection and conservation of threatened and endangered species. The act was written in response to a growing concern in the United States that species were being "rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation...."[10] Because species protected by the act are on the brink of extinction, harm to even a single individual could reduce the viability of the species as a whole. Therefore decisions regarding habitat modification and harm cannot be made by looking narrowly at the effects of one project and one area (such as the loach minnow in Whiteriver), but must be considered in an overall species context.

Applicability of the ESA on Indian Land

Because the Endangered Species Act was not written with Indian tribes in mind, there is some debate concerning the applicability of the ESA on Tribal lands. The sovereign status of tribes seems to argue that tribal governments have the legal right to regulate the uses of land and resources within their reservation boundaries. However, many court decisions have abrogated treaty rights for the purpose of conservation.[11] An oft cited quote by Justice Douglas in a decision known as *Puyallup II* stated that "the Treaty does not give the Indians a federal right to pursue the last living steelhead until it enters their nets".[12] Tempering that somewhat, other court decisions have stated that all reasonable measures must be taken to restrict non-Indian activities before treaty rights may be regulated.[13] Most people agree, however, that a challenge to the ESA by Tribes would prove unsuccessful.

The Difference between Tribal and FWS Views of ESA Enforcement

Given the ambiguous application of the ESA on Indian land, it is not surprising that tribes and the FWS have divergent views on ESA enforcement. The position of the WMAT is that while the ESA may apply on reservation land, Tribal sovereignty mandates that the FWS negotiate directly with the Tribe on a government to government basis. "The Tribal Council possesses and exercises sovereignty over all natural resources within the Fort Apache Indian Reservation and is obligated to protect and manage those resources for the benefit of [the] White Mountain Apache people. [The Tribe's] sovereign status demands government-to-government interactions to address natural resource issues affecting the Tribe or the Reservation."[14]

The FWS, on the other hand, views ESA enforcement differently and it could be useful for the Tribe to keep this in mind when dealing with them. The role of the FWS is to preserve and

conserve plants, fish and wildlife throughout the United States. FWS personnel are primarily biologists and are concerned with species protection and recovery. A former BIA official characterized them as "natural resource police". This role tends to take the form of regulation rather than cooperation. Within FWS's understanding of the law and their role, there is little distinction between Indian land and non-Indian land. Although recent developments such as FWS hearings in Whiteriver and the new Draft FWS Native American Policy (see Appendix L) suggest a trend toward greater respect for Indian sovereignty, it is important to recognize that FWS sees its primary role as protecting species; sovereignty and human needs come second.

FWS Enforcement of ESA: Section 7 Consultation

Threatened and endangered species are protected by the ESA through a FWS project review process known as "Section 7 consultation". (For a guide to the meaning of terms found in the ESA, see Appendix B: ESA Definitions.) This is a three-step process that allows FWS to ensure that federally protected species are not harmed through human action (see Figure 2). Any action that involves federal monies (including 638 funds), federal permits, or federal agency activity (i.e., BIA, IHS) in an area known to support T&E species requires a Section 7 consultation. The first two steps are a screening process known as "informal consultation" in which 1) the action agency (the Tribe or its agents: BIA, IHS) inquires from the FWS whether a T&E species may be present in the action area, and if so, 2) the action agency prepares a Biological Assessment to determine whether the species or its habitat is likely to be adversely affected by the action. If the biological assessment determines that the action is not likely to adversely affect T&E species, and the FWS concurs with this finding, then the "informal" Section 7 consultation is complete. The action is allowed to continue as long as it meets other applicable laws (NEPA, etc.).

However, if the biological assessment determines that the action is likely to affect T&E species or its habitat, or if FWS does not concur with a finding of no affect, the action agency must request "formal consultation". In this third step of the process, the action agency submits both the biological assessment and detailed data such as survey information and data analysis (See "Data Collection and Data Analysis" in Section II). The FWS then issues a Biological Opinion using "the best scientific and commercial data available".[15]

If FWS determines that no harm is likely to result from the action, it issues a "non-jeopardy" opinion. This allows the project to go forward, and may include permission for "incidental takings" if such actions do not jeopardize the species' survival or adversely modify critical habitat. If FWS determines that harm is likely to occur as a result of the proposed action, it issues a "jeopardy" opinion and "reasonable and prudent alternatives" to the action. The reasonable and prudent alternatives are designed to allow the purpose of the proposed action to be achieved while maintaining the spirit of the ESA.

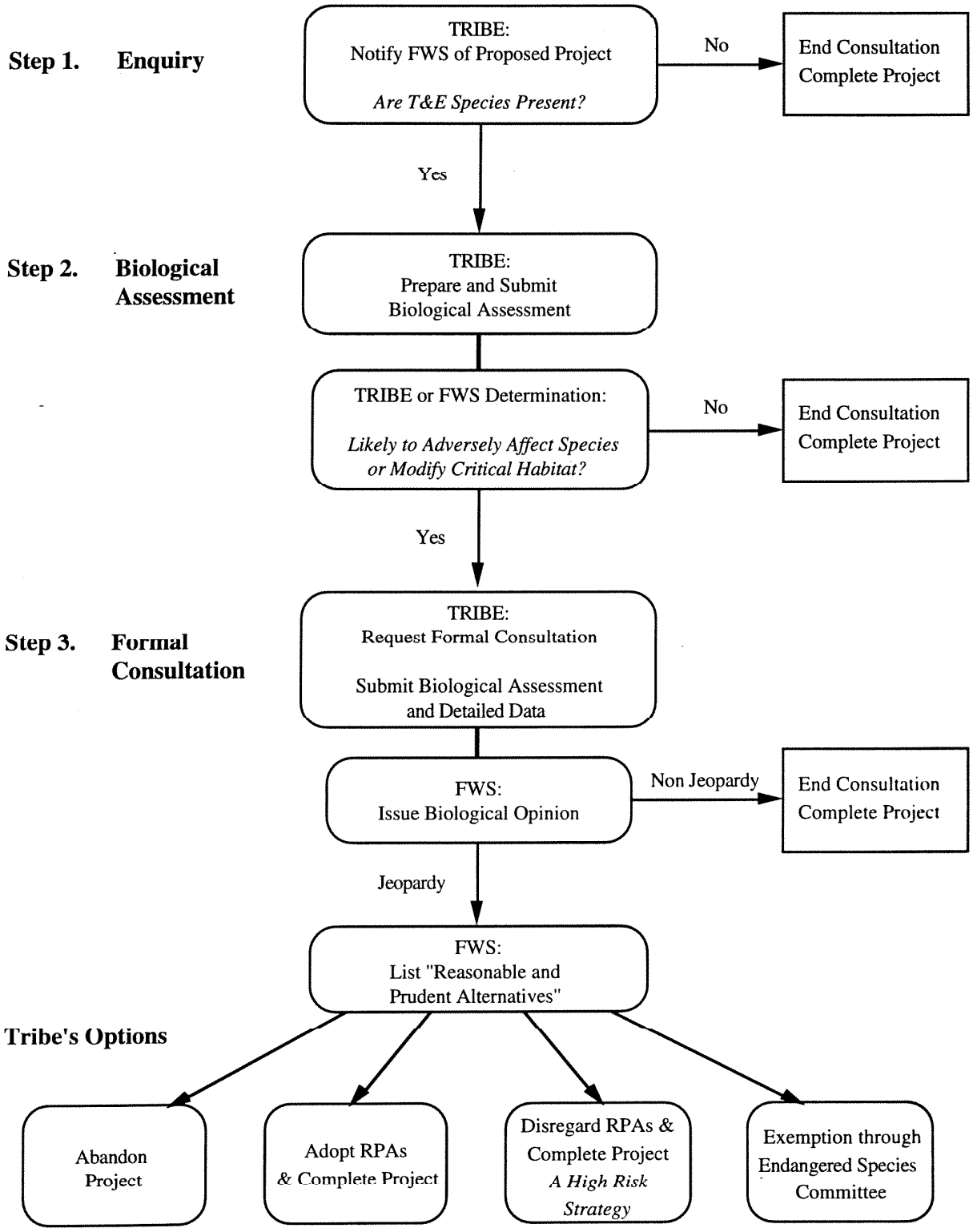
The biological opinion marks the end of the formal consultation and the Section 7 process. If a jeopardy opinion is received, the action agency has only four choices: 1) abandon the project, 2) modify the project using the FWS reasonable and prudent alternatives, 3) ignore the FWS Opinion and attempt to complete the project, or 4) apply for an exemption through the Endangered Species Committee. The first is usually not desirable. The third is made difficult because BIA and Congress would refuse to fund the project. In addition, it is a very risky strategy that is rarely successful in court. The fourth–the exemption process–is extremely cumbersome and nearly impossible to qualify for.[16] The second is generally the preferred choice at this stage.

The consultation process underlines the importance of effective, informed communication in producing a favorable outcome. At each stage of contact, the Tribe has considerable opportunity to work with FWS in designing an action that achieves the goals of the Tribe while satisfying the requirements of the ESA. If the project is well designed and mitigation strategies are incorporated, an "incidental take" permit can sometimes be granted allowing the Tribe to potentially harm some species in order to complete the project. Said one conservation official with significant ESA experience, "If Tribes enter the Section 7 consultation process with an attitude of willingness to work things out, most are successful."[17] Working things out prior to a jeopardy opinion is critical, because once a jeopardy biological opinion is finalized, the action agency is stuck with the result; there is no appeals process.

Section 7 consultations can, in fact, be quite flexible. In a five year national survey of Section 7 consultations, the World Wildlife Fund found that of 2000 formal consultations, only 350 (17.5%) received jeopardy opinions. Of those, only 18 (less than 1%) were ultimately blocked or terminated due to the ESA. That averages out to less than 4 per year nationwide. Although information wasn't available for Section 7 impacts on Tribes, in Region 2 where WMAT is located, only eight jeopardy opinions and 3 blocked activities have occurred in five years.[18] In fact, according to Sam Spillar at the Phoenix office of FWS Ecological Services, no project overseen by his office has ever been absolutely stopped because of T&E species; a compromise has always been found. He did say, however, that the loach minnow/IHS water diversion and treatment project might be the first where no viable alternatives could be found.[19]

Figure 2

The Section 7 Consultation Process



Lessons from the Section 7 Consultation Process

In discussion with FWS biologists and others, three lessons emerged regarding the WMAT's ability to successfully manage the Section 7 consultation process.

- **Adequate and credible survey data:** In order to consult, the Tribe must have adequate and credible survey data. Biological Assessments and Opinions are based on the biological status of the species and the likely effect of the project. In the absence of sufficient data, the FWS must err conservatively toward the protection of species. Adequate and credible survey data allow the FWS to have greater certainty in opinions and reduces the necessary margin for error on a project. This translates into fewer restrictions on project activities.

- **Communicate and negotiate:** The Tribe should communicate and negotiate with FWS at each stage of the consultation process. With input from the Tribe, conflicts can generally be worked out prior to the issuance of a jeopardy opinion.

- **Mitigation measures:** If a project comes in with mitigation measures already built in, it is more likely to be approved. Incorporating mitigation measures into project design can reduce or eliminate any harmful effects of the project, thereby supporting a claim of no effect. In addition, it demonstrates the Tribe's commitment to species protection and builds greater confidence among FWS biologists that the Tribe has the expertise and the willingness necessary to manage its T&E species populations well.

ESA Critical Habitat Designation

Critical habitat is a geographic area on which are found those physical or biological features essential to the conservation of a listed species. Critical habitat designation prohibits human action that would destroy or adversely modify that area in a way that would jeopardize the survival and recovery of a listed species.

However, critical habitat designation is not nearly as restrictive as is publicly perceived. Although onerous from the perspective of Tribal sovereignty, critical habitat designation has little real significance above and beyond species designation and Section 7 consultation. The consultation process remains the same as without critical habitat designation in the sense that human action cannot harm or jeopardize the species' survival or adversely modify (undesignated) critical habitat. The major impact of critical habitat designation is that habitat modification is prohibited if it jeopardizes both the survival and recovery of a listed species. However, actions that do not adversely impact the habitat's ability to support listed species are still allowed.

There is some debate concerning designation of critical habitat on Indian lands, and there are precedents that go both ways. In Florida, critical habitat has been designated on Seminole Indian lands for conservation of the Florida panther. In contrast, recent northern spotted owl critical

habitat designation set precedent by actively avoiding designation on Indian lands. It appears that FWS will designate critical habitat on Indian land only when the survival of the species depends on it.

Lessons for the Tribe from the ESA

From the above discussion of the Endangered Species Act and its processes, two points stand out. First, for all practical purposes, there is no way for the Tribe to avoid compliance with the ESA. No matter how capable its natural resource management capacity, every action will require at least an informal Section 7 consultation with FWS. Second, the Tribe will only face restrictions to its sovereign management of natural resources if it does not adequately provide for the protection of T&E species and their habitats. If Tribal activities do not harm listed species then no conflict exits. Therefore, the best strategy is to design Tribal development activities such that no T&E species or habitat are harmed.

Collecting Information: Pros and Cons

Because Section 7 consultation will nearly always be required for development projects on the Fort Apache Reservation, having biological information is a critical issue. On the basis of conversations with FWS officials, biologists from other tribes, and a range of people familiar with T&E species conflicts, the overriding opinion was that a lack of information on T&E species hindered resource use decisions. When it is known that T&E species may be in the vicinity of a proposed action, the more information the better. This has been the experience of both The Yakima and The Confederated Salish and Kootenai Tribes. The benefits of actively gathering information on T&E species include making good resource use decisions, developing mitigation measures, and challenging FWS modification requirements.

- **Resource use decisions:** Choosing among projects and their locations (i.e., timber cut, road construction) to minimize environmental damage or enhance environmental benefits requires knowledge of the likely effects of each possible activity. In the case of T&E species, the only way to predict the likely effects of an action is to know where species are, what their habitat needs are, and how the action is likely to interact with the species or its habitat.

- **Mitigation:** Once an action is chosen in which T&E species may be affected, information is necessary to plan mitigation measures. FWS will often approve a project if appropriate mitigation measures are built in. With knowledge of species and habitat requirements, actions can be planned such that harm is minimized or eliminated.

- **Challenge FWS project modification requirements:** Recommendations and requirements by FWS to modify project proposals are at times based on inconclusive data or on conditions that do not apply to the Tribe. Mexican spotted owl habitat guidelines may be such an example, because most data comes from the Forest Service which practices clear cutting. If the Tribe, through its own research and data collection, can produce credible survey data and analysis that supports the biological integrity of its findings, a stronger case can be made in negotiations with the FWS over project design.

It must be noted, however, that collecting information is not risk-free. The presence of T&E species obliges the Tribe to take protection measures and leaves the Tribe open to possible development restrictions. In addition, it is sometimes the case that research will uncover species that were not previously known to exist on the reservation. As the Tribe found with its Arizona willow surveys, such information can be used by FWS to make a case for listing and defining critical habitat. This danger should not be understated. Indeed, people or groups with strong environmental agendas may use the presence of T&E species to stop activities to which they are opposed. Many believe this is the case in the Pacific Northwest in which the owl is being used a legal weapon to prevent the continued logging of old growth forest.

Although there are some risks associated with gathering data on T&E species, it is important to balance these against the risks and costs of not having data. First, without good data, the analysis of biological effects must be carried out with what little data is available. This will generally work against the Tribe. As in the case of the loach minnow/water diversion project on the north fork of the White River, this requires the FWS to err conservatively and consider a worst case scenario. Indeed, as one Tribal biologist put it regarding the loach minnow conflict, the FWS knows the Tribe doesn't want to find T&E species, so it guesses and writes a jeopardy opinion.

Second, initial species inventories serve as a baseline upon which to judge changes in population numbers, distribution, density, health, and habitat requirements. Without such baseline data, it is difficult to argue that species are being well protected and therefore don't need additional FWS protection.

Third, by not conducting surveys until a project is affected by the ESA, the Tribe is left without sufficient data to perform a biological assessment. For example, current FWS survey protocols require two years of survey data to determine owl habitat. Because the Tribe has only one year's worth of data, it is possible that the FWS could stop all timber harvesting on the reservation for a full year until sufficient data is gathered. Even if FWS allows an exemption to the Tribe in this case, this is an important lesson as to the value of collecting data before a conflict erupts.

In addition, by not collecting data prior to listing, the Tribe must scramble to collect data in a hurry. As the Tribe's recent experience with the Arizona willow and the Mexican spotted owl will attest, this requires considerable time and energy by Tribal staff. Selected personnel of Tribal

Forestry, Game and Fish, Department of Planning, Legal Department and others have each foregone attention to their normal duties in order to concentrate on T&E species concerns. This causes delays in forestry operations, hinders the Tribe's ability to provide normal services to members, and results in a less than optimal response to T&E species concerns.

Summary

In the preceding analysis we have considered the presence of T&E species on the reservation and two potential reactions to them. We have seen that the Tribe must comply with the Endangered Species Act, but that there is some room for flexibility within the Section 7 consultation process. And we have seen that the key to exploiting that flexibility and maintaining sovereignty over natural resource use decisions is to have sufficient information and to design Tribal development activities such that T&E species and habitat are not harmed.

If the WMAT accepts the above premises that a) T&E species could severely limit Tribal economic activities and are likely to be a continuing concern, and b) recent Tribal strategies to limit the flow of information have not successfully protected the Tribe from federal restrictions under the ESA, then the logical conclusion is for the Tribe to develop its T&E species management capability. The remainder of this report analyzes this task, its constraints, and potential options for successful implementation.

II. The Task:
Building Endangered Species Management Capability

The end goal for the Tribe in its conflicts with the ESA is to maintain sovereignty over natural resource management on Tribal land. This means making resource use decisions without FWS interference resulting from critical habitat designation or project modification. As we have seen in the preceding analysis, the essential components necessary for maintaining sovereignty are 1) good biological data, and 2) project design that does not adversely affect T&E species or their habitat. By building T&E species management capability, the Tribe will improve its internal capacity to develop its resources without harming species.

The presence of T&E species will almost certainly require modification to some Tribal activities and development plans. However, in order to maintain sovereignty, the Tribe should make the modifications, not the FWS. By creating the capacity to gather sufficient knowledge of species and their habitat requirements, projects can often be designed such that they accomplish the dual goals of maximum economic benefit to the Tribe and conservation of species and habitat. In other words, increased T&E species management capacity is the key to sovereignty over natural resource use decisions.

This section describes the task of building Tribal T&E species management capacity. It will consider the deficiencies in the current system, describe the components of an improved T&E species management system, and analyze the capacity of existing institutions to manage T&E species.

Deficiencies in Current Management System

In my discussions with a variety of people familiar with the WMAT, three issues have been identified which constrain the Tribe's ability to effectively manage T&E species:

- **Lack of data:** The Tribe has minimal information on the quantity, health, population trends, and habitat requirements of most T&E species and candidate species. Without such data, it is difficult for the Tribe and the FWS to predict the impact of Tribal development activities on T&E species and habitats. In addition, appropriate mitigation measures are difficult to identify and incorporate into the project design.

- **Inadequate capacity:** The Tribe lacks the personnel, technical expertise, and designation of responsibility necessary to adequately manage its T&E species. The Tribe employs only three biologists for its entire 1.68 million acres of wilderness. Although highly competent, Tribal biologists are spread too thin to effectively manage T&E species in addition to their other duties. Furthermore, their technical expertise is in harvestable fish and wildlife management rather than T&E species conflicts. In addition, although there are many listed plants on the reservation, there is no botanist to handle their management. Finally, there is no person, department, or institution with responsibility for oversight and coordination of T&E species management. This leaves the Tribe unprepared when conflicts arise and vulnerable to mistakes.

- **Recent loss of credibility regarding T&E species protection:** The Tribe tends to be reactive rather than pro-active in the face of conflicts between T&E species and Tribal development. Instead of seeking ways to actively protect species, the Tribe has attempted to fight most conservation measures. The Tribal Council's decision to bar FWS from access to the reservation for loach minnow, Arizona willow, and spotted owl surveys has led to animosity and accusatory communication between the Tribe and the FWS. Some federal officials doubt that the Tribe can be trusted to adequately protect T&E species as required under the ESA.

Each of these constraints limits the ability of the Tribe to exercise sovereignty over its natural resources. Without sufficient data and capacity, the Tribe cannot hope to develop its resources without harming species. Given these deficiencies and the Tribe's past actions regarding ESA enforcement, the FWS is forced to intervene on behalf of T&E species, thereby causing conflict and a loss of Tribal sovereignty.

The Remedy: Components of an Improved Management System

Overcoming these constraints is the first step toward preserving sovereignty over Tribal natural resource management. Simply put,

> ***The Tribe must develop the internal capacity to collect and manage data on T&E species and their habitat, and use that data to make responsible natural resource management decisions.***

If projects are designed such that T&E species or their habitat are not adversely affected, there is no reason for FWS or other government agencies to interfere in the Tribe's development activities.

The following provides some detail of the major components of T&E species management: Data Collection, Data Management, and Data Use (see Figure 3). In addition, ways to improve

Tribal credibility regarding T&E species management will also be suggested. Finally, the capabilities of existing Tribal institutions regarding T&E species management will be analyzed.

Data Collection

The Tribe must have the continuing capacity to collect a wide range of information on T&E species. Data collection involves field surveys by qualified observers (biologists or trained technicians) to inventory and monitor listed and potentially listed plants, fish, and wildlife. Surveys provide information on which species are found on the reservation and which are not, as well as species' locations and habitat needs. Data collection also involves research into the needs of species and their interactions with the ecosystem. This information arms the Tribe with the data necessary to design mitigation measures or otherwise develop resources without harming species.

For the purposes of analysis, data collection can be broken into five categories: species, general habitat types, critical habitat, human activities, and external research.

- Species data: Raw survey data on species includes numbers of individual sightings, location, health, migration patterns, propagation, predation, environmental contaminants, and changes over time. This allows the Tribe to know exactly what is on the reservation--and what is not.

- General habitat types: Currently, wilderness areas on the reservation are mapped by timber type rather than habitat type. Because timber types are not sufficient to predict suitable habitat for most species, the Tribe would benefit from conducting a habitat survey that defined the types of habitat that exist throughout the reservation. Based on this information a wildlife habitat relationship matrix could be developed to predict distributions of species. This would allow the Tribe to know where T&E species are likely to be found. The US Forest Service has a system known as Linear Habitat Mapping that measures habitat areas and determines if they are sufficient to support a particular species.

- Critical habitat for specific species: Critical Habitat data is unique for each species and must be well understood in order to design projects with minimal adverse impact to T&E species. Some general categories of information include: space required for normal behavior and for individual and population growth; nutritional or physiological requirements such as food, water, air, light, minerals; cover or shelter; sites for breeding, reproduction, rearing of offspring, germination or seed dispersal; roost sites, nesting grounds, spawning sites, feeding sites; seasonal wetland or dryland; water quality or quantity; host species or plant pollinator; and geological formation such as vegetation type, and specific soil type.

- Human activities: The uses of Tribal natural resources should be recorded by activity, season, and duration. Data collection will catalogue habitat modification activities such as

timber cuts and road construction to determine the degree of modification and its effects on species and habitat. This will give the Tribe a clear record of natural resource use on the reservation and can be used to demonstrate how the Tribe has developed its natural resources without harming T&E species.

- External research: Technical information on FWS policy, species management techniques, and new listings can be found from a variety of sources, including the FWS, Forest Service, Technical journals, and national conservation organizations such as The Nature Conservancy. This data should be compiled to keep the Tribe current on issues affecting its management of T&E species.

Data Management

Once the Tribe begins gathering the wide array of data necessary for managing T&E species, it must have a system for categorizing the information and making it useful to others. Data management has four basic components: gathering information from a variety of sources, compiling that information into useful forms, analyzing the data, and providing information to those who need it. Each is a step toward enhancing control over activities and their effects throughout the reservation.

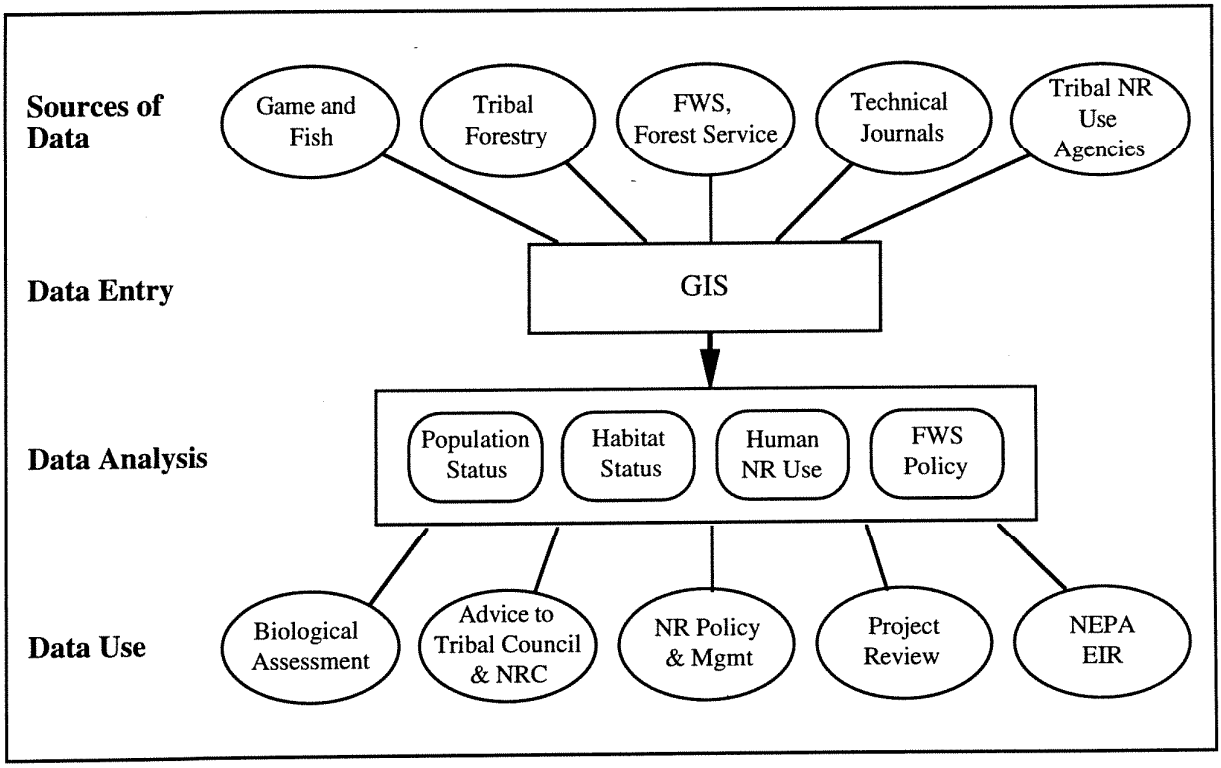


Figure 3. ***Components of Data Management***

- Sources of information: Raw survey data will be provided by biologists and technicians from Game and Fish, Tribal Forestry, BIA and others. Resource use information will be provided by the BIA and Tribal Enterprises and Departments that use natural resources such as FATCO, Sunrise, Department of Planning, and Tribal Land Office. Research and other information will come from FWS, Forest Service, State Fish and Game Department, scientific literature such as journals and technical publications, and conservation organizations such as The Nature Conservancy.

- Compiling information into useful forms: This involves using a computer database to keep track of all the Tribe's data on species, habitat, and human uses of natural resources. Currently, the BIA has a well developed Geographic Information System (GIS) that is accessible to the Tribe. This system can map species locations and habitat, as well as human activities such as timber cuts and road construction. Managing this task requires computer skills, especially data entry and knowledge of the GIS system.

- Analyzing the data: Once raw data is categorized in the GIS system, biologists must analyze it in order to provide the information necessary for making decisions. Analysis can determine species' population status, habitat status, health, propagation, migration patterns, habitat requirements, habitat maintenance and manipulation, management techniques and reintroduction attempts, predation and its control, and the effects of past human activities. Good analysis is essential to maintain Tribal credibility with the FWS as well as for the Tribe to gain a clear understanding of what it has on its reservation and what kind of development activities would be least harmful to wildlife and T&E species.

- Distributing data to those who need it: Once compiled into useful forms and analyzed, data can then be distributed to those who must use it. Requests for information may come from the Tribal Council, the Natural Resources Committee, Tribal Forestry, Game and Fish, Department of Planning, Tribal Land Office, Legal Department, BIA, and FWS. Because some data may be considered sensitive, the Tribe may want to design a data security classification system in order to control the distribution of information.

Data Use

Understanding how data will be used can guide the Tribe in prioritizing its data collection, management and analysis. Given the current conflicts with the Arizona willow and the spotted owl, the highest priority uses of survey and other data for the Tribe are:

- Preparing Biological Assessments,

- Developing mitigation measures for projects, and

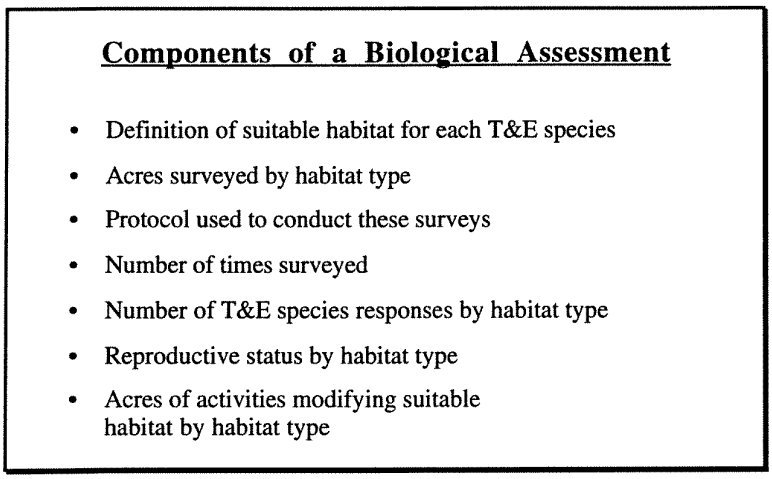


Figure 4

- Developing species conservation and development plans.

Other uses of data include NEPA Environmental Impact Assessment, Tribal environmental review of development projects, development of Tribal wilderness or natural resource policy, Tribal land restoration and conservation initiatives, and FWS information searches on T&E species locations and habitat requirements. Because each use requires specific data, I will not detail each here. The components of a biological assessment are listed in Figure 4. Additional types of data can be found in Appendix F.

Building Capacity and Credibility

The Tribe can increase its credibility as a responsible manager of T&E species by increasing its T&E species management capacity and taking positive actions to conserve and protect listed species and their habitats. Due to current FWS distrust of the Tribe's motives, increased credibility will not happen quickly; it is a process that can only be built over time. Data collection and management are the first steps. Additional pro-active steps include assigning responsibility for T&E species management and increasing T&E species staffing, training Tribal members as biologists or technicians, instituting Tribal environmental review, developing a Tribal T&E species policy, and informing Tribal members and visitors about the needs of T&E species.

- **Assign responsibility for T&E species management:** A person, task force, office, or department should be assigned responsibility for T&E species management in order to coordinate and facilitate the work detailed above. The person designated with this responsibility should be a trained biologist who is familiar with the reservation. He should begin the processes of 1) conducting a quick needs assessment to prioritize activities, 2)

hiring and training additional biologists (wildlife, fisheries, and plants) and technicians, and 3) collecting and analyzing survey data for use in biological assessments, mitigation measures, and conservation plans.

- **Train Tribal members as biologists and technicians:** Increasing the number of Tribal members trained in biology and survey techniques will enhance the Tribe's ability to control natural resource decisions and reduce its dependence on non-Tribal members.. The Confederated Salish and Kootenai Tribes have instituted such a training program to encourage Tribal members to pursue a Masters of Science degree in wildlife biology, wildlife management, etc., based on their general goal of having all employment positions filled with Tribal members by 1995 (see Appendix N).

- **Institute Tribal environmental review**: Initiating a process of environmental review will allow the Tribe to assess the likely affects of development projects on species and habitat. This would be a step prior to the biological assessment in which conservation and mitigation strategies would be incorporated into project design. Environmental review allows the Tribe to be pro-active rather than reactive, and gives the Tribe control over development activities on the reservation. The review could prevent activities that go against Apache cultural values and resolve conflicts in-house rather than having FWS intervene.

- **Make and enforce Tribal natural resource Policy:** The Tribe should adopt Tribal wilderness and conservation policies that are consistent with the intent of the ESA and other applicable federal laws, as well as in line with Tribal cultural values. These policies include T&E species conservation and recovery plans, as well as protocols that direct projects involving natural resource use to be screened for affects to T&E species and sacred sites. These policies must be actively enforced if the Tribe is to be considered credible in its commitment to responsible natural resource management.

- **Inform Tribal members and visitors about the needs of T&E species:** The Tribe should take steps to increase awareness among Tribal members and visitors about the needs of T&E species protection. By highlighting the value of these species, greater respect for their needs will be fostered. This will lead to a greater willingness to protect species among Tribal members. In addition, those who may come in contact with T&E species should be informed about how to avoid harming them.

Incorporating Apache Values into T&E Species Management

Developing these capabilities within the Tribe should not be thought of as simply complying with FWS requirements. Instead, increasing T&E species management capabilities is a way for the Tribe to protect its sovereign responsibility to preserve its homeland in the Apache way. Because

the Tribe wishes to continue using its natural resources to provide for Apache well-being while respecting its land and its home, it is essential that the Tribe know as much about its natural resources as possible.

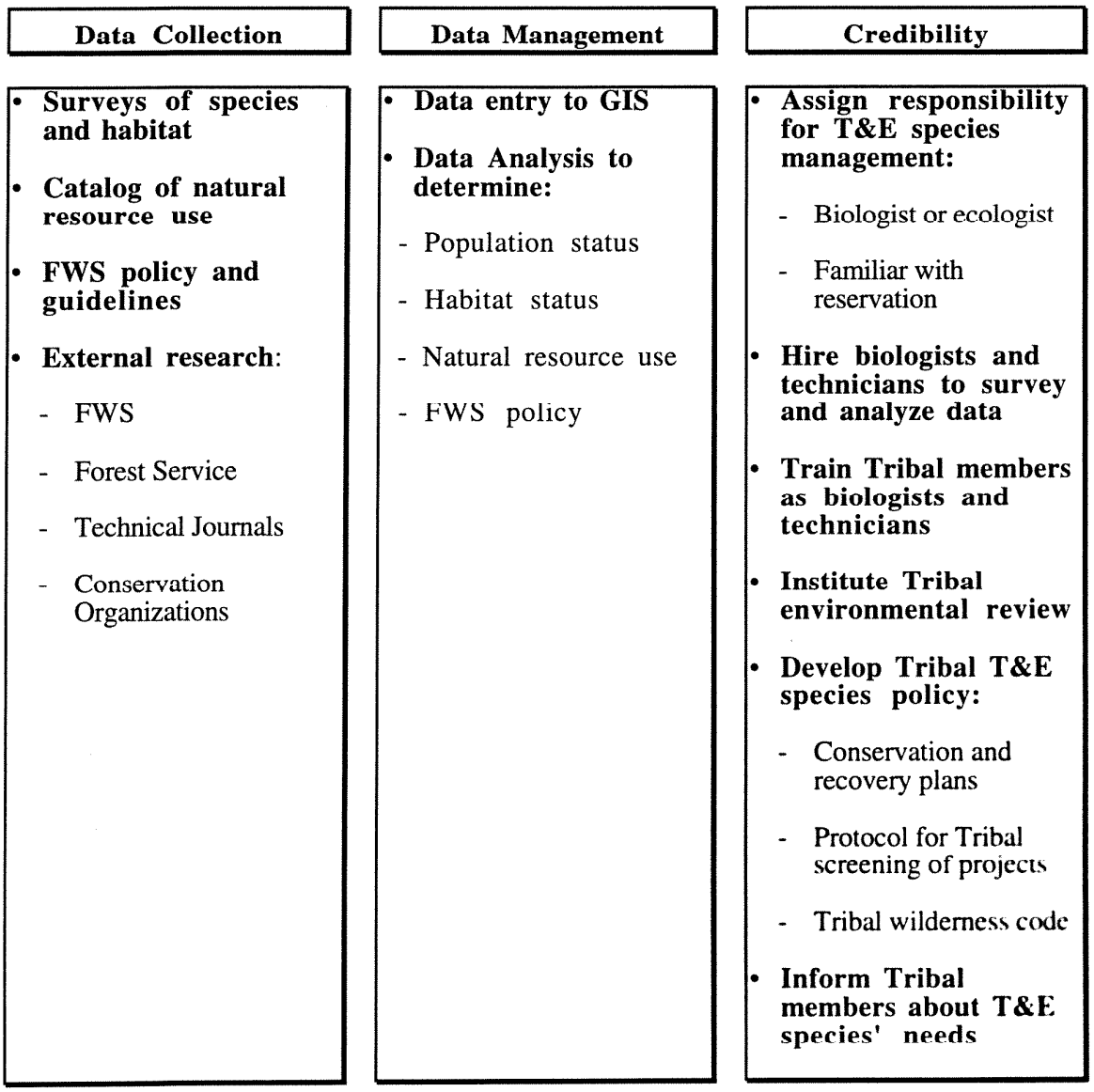
In addition, taking the above steps toward greater natural resource management capability affords the Tribe an opportunity to incorporate its own Apache values into resource management. This could mean protection of sacred sites, as well as animals, plants, herbs and other items used for cultural and religious reasons that have special value to Tribal members. Developing a Tribal Wilderness Code or an Integrated Resource Management Plan that reflects the cultural and religious values and the vision of the White Mountain Apache would allow the Tribe to incorporate T&E species protection into the greater goals of conserving its homeland.

This is an opportunity to expand the Tribe's understanding of how it currently uses its resources, and how it may prefer to use them. If the Tribe does not exercise sovereignty over its homeland, the reservation is vulnerable to exploitation through economic development that is not culturally appropriate. Thus, the purpose behind collecting data and developing capacity is more than just the protection of T&E species; it is really the protection of the Tribe's Apache culture, homeland, and sovereignty.

By improving natural resource management capability, the WMAT is also creating the ability for the Tribe to define *for itself* how it wants its homeland to be. This is a chance to bring the standards up to reflect the Apache way rather than abiding by a non-Apache way. Indeed, by establishing natural resource management guidelines that articulate an Apache vision for the future, the Tribe is going beyond simply exercising sovereignty to actually enhancing it.

Figure 5

Components of an Endangered Species Management System



Capabilities of Existing Tribal Institutions

There are three Tribal institutions that could be given responsibility for T&E species management. They are Game and Fish, Tribal Forestry, and the Natural Resource Committee. Each institution has its strengths and weaknesses regarding the duties of T&E species management. The following analysis will consider the suitability of their current technical resources to the needs of T&E species management, the compatibility of the mission, and potential overlap and conflict with the authority of other institutions.

Game and Fish Department: This department's mission is to manage and preserve the Tribe's harvestable wildlife (primarily for elk hunting and fishing) for the purpose of revenue generation. Currently this agency has two wildlife biologists, one fisheries biologist, and six full- or part-time technicians trained in data collection. This is the only department on the reservation that has the technical expertise to conduct the data collection and analysis necessary to meet the needs of T&E species management. In addition, its biologists have a good reputation in the state as capable natural resource managers.

While the department's mission is in many ways very compatible with T&E species management, there is a small concern that placing the additional duties of T&E species protection on Game and Fish could blur its mission and create a potential conflict of interest if the needs of harvestable wildlife conflicted with the needs of T&E species. Furthermore, if no additional personnel were added to the department, the increasing time commitment necessary to manage T&E species would necessarily cut into the time available for management of harvestable wildlife, thus possibly reducing the quality of the elk herd and the revenue generated from it. Finally, because T&E species conservation measures can involve restricting some development activity, these decisions may conflict with the authority of the Natural Resource Committee.

Tribal Forestry: Tribal Forestry's mission is to oversee BIA and FATCO timber management practices in order to maximize timber revenues while maintaining forest quality. This department is headed by a trained and experienced forester who has three technicians reporting directly to him. Two are enforcement officers charged with preventing wood poaching and illegal cutting. The third is a forestry technician who monitors air pollution, resource damage, and forest regeneration. None of these people currently conducts nor is trained in wildlife or T&E species surveys.

The department's focus is on timber rather than plants or wildlife and so would be inappropriate for the duties of T&E species management. It is staffed with foresters rather than biologists, and is oriented toward trees rather than species and habitat. Finally, because funding for this department comes from stumpage revenues which are dedicated to improvement of forestry resources, it is unlikely that Tribal Forestry could legally take on the role of T&E species management.

Natural Resource Committee: This is an ad hoc group comprised of people from Tribal enterprises, departments and the BIA who are responsible for natural resource use policy on the reservation. Its purpose is to coordinate natural resource use decisions for the Tribe. However, this is an advisory body only; it has no administrative support nor technical capability. By itself, it can not implement projects, nor does it act as a centralized information source. Its members participate only in their capacity as officials from other organizations. In addition, the Natural Resource Committee is headed by the timber operations manager for FATCO, and is heavily oriented toward maximizing Tribal timber revenue. This could lead to a significant conflict of interest between timber and T&E species if protection measures meant reducing the timber harvest or increasing harvesting costs.[20]. Although T&E species management could fit within the mission and authority of this committee, because of its structure the Natural Resource Committee has no capacity to actually carry out the duties required. It could, however, provide oversight or act in an advisory role to the institution designated with T&E species management duties.

III. The Solution:
Options for Future T&E Species Management Capacity

In the preceding pages we have considered the threat to the Tribe's sovereignty posed by T&E species, examined the requirements of the ESA, analyzed the deficiencies in the Tribe's capacity to manage T&E species, described the components of an improved management system, and evaluated the capabilities of existing Tribal institutions to carry out those duties. The analysis has shown that in order to maintain sovereignty over its natural resources, the Tribe must develop the internal capacity to collect and manage data on T&E species and their habitat, and use that data to make responsible natural resource use decisions. If projects are designed such that T&E species or their habitat are not adversely affected, there is no reason for FWS or other government agencies to interfere.

In this section, I will examine three options for future T&E species management capacity. (See Figure 6) The first is to make no change at all. This will describe the potential consequences of not increasing the Tribe's management capability and will be used as a baseline to judge the value of taking action toward increasing capacity. The second locates an Office of Endangered Species within Game and Fish. And the third creates an independent and freestanding Office of Endangered Species Management. A fourth option, an Endangered Species Task Force, is not considered because it is not likely to provide adequate capacity to prepare the Tribe for future conflicts with T&E species.

Option I: Make no change

The WMAT currently deals with its T&E species problems by having Game and Fish biologists or outside consultants do ad hoc surveys and biological assessments for each action proposed by the Tribe. When a new species affecting the reservation is proposed for listing, the Tribe scrambles to gather data and assess the potential affects during the short comment period allowed by the ESA. Tribal officials from Game and Fish, Tribal Forestry, the Legal Department, and the Department of Planning put aside much of their other work to deal with each new T&E species crisis. As we have seen in the preceding analysis, this has not worked well for the Tribe.

A decision to do nothing leaves the Tribe with the deficiencies detailed in Section II: lack of data, lack of capacity, and lack of credibility. The consequences of not improving the Tribe's T&E species management capacity can be broken down into the following categories:

- **Reactive rather than pro-active:** Without a centralized source of information and designated responsibility, the Tribe will not have the guidance nor technical personnel necessary to gather and prepare data prior to its need . It will continue to react—species by species—to each new listing and each new conflict. It is unlikely that any comprehensive T&E species surveys or habitat mapping would occur, leaving the Tribe without an adequate understanding of habitat requirements or likely reactions to proposed actions. Surveys and reports could be conducted, but mitigation measures would be hindered and no research or pro-active activities to enhance habitat or T&E species viability would be pursued. In addition, Game and Fish biologists would become overtaxed with this additional responsibility and their other duties (elk herd management, etc.) would suffer.

- **Vulnerable to restrictions by FWS:** The continued lack of data would leave the WMAT in a vulnerable position; the Tribe would have little recourse against overly conservative biological opinions prepared by FWS. Conflicts would be sure to erupt, consuming a significant amount of time and resources from Tribal officials. In a worst case scenario, the Tribe could find itself in a situation similar to the Hawley Lake conflict of 1957 in which Tribal members with guns prevented reservation access by federal officials in order to carry out a development project. Unlike Hawley Lake, however, the Tribe is unlikely to win such a battle against the ESA, and its future credibility would be severely impaired. In addition, FWS can influence the use of BIA money by the Tribe. By not complying with Section 7, FWS could deny BIA money for timber presale, thereby shutting down the entire forestry operation.

- **Reduced sovereignty:** In the end, making no change does nothing to increase the Tribe's sovereignty over natural resource use. Conflicts between the Tribe and FWS will likely continue, and the Tribe will be forced to struggle to maintain its sovereignty over natural resource use decisions in the face of each new T&E species conflict. In fact, without increased T&E species management capacity, the Tribe is likely to have its sovereignty eroded by increasingly invasive FWS requirements. With each new species and each new conflict, the Tribe will be forced to accept FWS guidelines rather than developing its own mitigation measures appropriate to the needs of the Apache people and land.

Option II: Create a T&E species management unit within Game and Fish

This option would place responsibility for T&E species management under a single unit within the Game and Fish Department. It would create an "Office of Endangered Species" that would complement the harvestable wildlife management already performed by the department. This would formalize the current system of relying on Game and Fish biologists for T&E species

surveys while strengthening the department's ability to carry out the other T&E species management duties. In addition, it would not reduce the department's capacity to manage Elk, fisheries, and other harvestable wildlife.

This new section would be responsible for conducting species and habitat surveys, compiling and analyzing data, directing studies and research, evaluating projects and developing mitigation strategies, preparing reports, accessing the GIS, and mapping T&E species and habitat into useful categories. This would require that Game and Fish gain additional personnel including biologists (especially a botanist), data managers, and technicians.

Arguments in Favor of Option II

- **Maintains existing structure:** Using an already existing institution, this option would create improved T&E species management capability at minimal cost and minimal disruption to the current system. It would create a single unit with responsibility for T&E species which can collect and manage information. It would develop an institutional capacity to improve the Tribe's ability to manage T&E species and natural resources.

- **Consistent Mission:** T&E species management is consistent with the Game and Fish's mission to enhance wildlife populations. Game and Fish already has personnel capable of collecting field data; T&E species surveys could be incorporated into general wildlife inventory and monitoring activities already done. In addition, there is much overlap and coordination necessary between managing harvestable and non-harvestable wildlife that can be facilitated by placing both under one roof.

- **Precedent:** Placing the Office of Endangered Species within Game and Fish has many precedents. Both the Forest Service and most states place T&E species management under their wildlife program. In addition, many Indian Tribes also locate their T&E species conservation unit within their wildlife management division. One local example is the Navajo Natural Heritage Program[21] within the Navajo Fish and Wildlife Department.

Arguments Against Option II

- **Conflict of interest:** Locating the Office of Endangered Species within Game and Fish may not create the degree of credibility the Tribe requires in the short term. Game and Fish's focus on harvestable wildlife rather than protection of T&E species may compromise the effectiveness of T&E species management efforts. This may create the appearance and the actual existence of a lack of independence for the endangered species unit. Housing the unit in Game and Fish may not convince FWS of the Tribe's commitment to T&E species protection and recovery.

- **Inter-agency conflicts:** Because the activities of Game and Fish are sometimes in conflict with other departments or enterprises (and vice versa), housing the endangered species unit in Game and Fish may inhibit other Tribal agencies from cooperating with the Office of Endangered Species. Some Tribal members or departments may not wish to give Game and Fish authority (either regulatory or advisory) over development decisions and mitigation measures.

Evaluation of Option II

This option has the benefits of formalizing T&E species management responsibility in the department that has already informally been given that responsibility. The two types of work (harvestable and non-harvestable wildlife management) are highly compatible and will benefit from close cooperation and coordination. Concerns over an apparent conflict of interest between harvestable wildlife and T&E species are minimal, given Game and Fish's strong reputation as wildlife managers. With a credible director for the Office of Endangered Species , there should be little problem.

The only major concern is the willingness of other Tribal agencies to cooperate and comply with the recommendations of the Office. However, non-compliance will not likely be successful because actions still must undergo FWS oversight through Section 7 consultation. Therefore, in terms of both institutional feasibility and substantive effectiveness, this option seems to have a high probability of success.

Option III: Establish a Freestanding T&E Species Management Unit

Option III would place responsibility for T&E species conservation in the hands of a freestanding and independent "Office of Endangered Species". The major difference between this option and Option II is that this new office would be 1) independent rather than under Game and Fish, and 2) on an equal level with Game and Fish and other Tribal agencies. This office would be headed by a biologist or ecologist, and staffed with biologists, technicians and a data manager. As in Option II, it would be responsible for conducting species and habitat surveys, compiling and analyzing data, directing studies and research, evaluating projects and developing mitigation strategies, preparing reports, accessing the GIS, and mapping T&E species and habitat into useful categories.

Arguments in Favor of Option III

- **Independence:** This option would give clear authority and responsibility for T&E species management to a single entity. Being independent and newly created, it would have free

reign to establish its authority within the workings of the Tribal government. This would also look good to FWS, thereby creating additional credibility.

- **Equal authority with other Tribal agencies:** The Office of Endangered Species Management would be on an equal level with other agencies such as Game and Fish and Tribal Forestry. This would be appropriate because its advisory capacity would be similar to that of these two agencies.

- **Easily incorporated into a future Division of Natural Resources:** Some Tribal members have suggested that the Tribe should gain greater coordination and control over its management of natural resources. Placing Tribal Forestry, the Tribal Herd, Agriculture, the Tribal Land Office and others within a Division of Natural Resources may be one way to accomplish this. If in its vision of the future the Tribe would like the Office of Endangered Species to be a part of such a division, then making it independent and freestanding will make the incorporation relatively easy.

Arguments Against Option III

- **Duplicates existing technical capabilities of Game and Fish:** The creation of this office establishes a second set of biologists, wildlife technicians, and information management activities that is very similar to those found in Game and Fish. Game and Fish and T&E species management require comparable types of data collection and analysis activities that would unnecessarily be duplicated by two similar offices. This would be costly and inefficient for the Tribe. Being separate, cooperation and coordination of activities could be made more difficult and conflicts over authority could occur.

- **Potential ineffectiveness:** Although being independent and freestanding may appear to create a strong department, it could also leave it ineffective and without authority if T&E species conflicts are no longer a "hot" issue within the Tribe. Without clear authority and legitimacy for its work, the Office could be hindered in its attempts to collect data or perform environmental reviews of projects. This would reduce the preparedness of the Tribe if new conflicts erupted or a new species were proposed for listing.

- **Potential loss of mandate:** By being freestanding and independent, the Office of Endangered Species must define its own role. Although its mandate within the Tribe is to protect and conserve T&E species, this Office could become heavily influenced by the Tribal Chairman, the Tribal Council, or FATCO. In that case, it would no longer counteract pressures for economic development or speak for the needs of T&E species.

Evaluation of Option III

Although this option accomplishes the goal of creating the capability necessary to adequately manage T&E species, it does so by creating an unaligned entity with uncertain substantive effectiveness in the long run. More importantly, it unnecessarily duplicates capabilities and structures already found in Game and Fish. On balance, this option is less preferred than Option II.

Options for Locating Improved T&E Species Management Capability

	Pro	Con	Evaluation
Option I **No Change**		• Reactive rather than pro-active • Vulnerable to FWS Restrictions • Reduced sovereignty	• Will leave the Tribe without sufficient capability to credibly claim sovereignty over natural resource use decisions. • Could have bad consequences.
Option II **In Game and Fish**	• Maintains existing structure • Consistent mission • Enhances coordination • Precedent	• Potential conflict of interest • Inter-agency conflicts	• Work is compatible • Conflict concern is minimal • Section 7 will require compliance
Option III **Freestanding**	• Independence • Equal authority with other agencies • Easily incorporated into future Div of NR	• Duplicates technical capability of Game and Fish • Potential ineffectiveness • Potential loss of mandate	• Unaligned office • Uncertain effectiveness • Duplication of capability is unnecessary and potentially problematic

Figure 6

IV: Taking Action:
An Implementation Strategy

Building the capacity to effectively manage T&E species should be accomplished in stages. (See Figure 8) The Tribe must focus on the immediate problems (i.e., the Arizona willow listing and spotted owl critical habitat designation) while laying the foundation for enhancing its sovereignty over natural resource use decisions. Below I suggest a process for developing this capacity that involves 1) the creation process of choosing a director, establishing an office, and creating a coordinating task force, 2) focussing on immediate needs, and 3) building on success. Some of these components fall into more than one stage; funding, for example, should be sought continuously from the beginning.

Stage I: Creation

- **Designate responsibility.** Appoint or hire a director to oversee and coordinate the duties of T&E species management. For the purposes of credibility and effectiveness, the three most important qualities of this person are that he be 1) a trained and experienced biologist or ecologist, preferably with T&E species background, 2) credible to both the Tribe and to FWS, and 3) familiar with the reservation. This person will be the primary contact through which T&E species information will flow between the Tribe and the FWS. Thus this person will become the spokesperson for the Tribe on T&E species issues.

- **Establish an office.** The Tribe must determine 1) where to locate the office (in Game and Fish, Tribal Government Offices, or elsewhere), 2) what role it will play (regulating, advising, planning, monitoring, or some combination), and 3) what authority it will have in relation to other departments. Some of these issues were analyzed in the Options Section above.

- **Convene an Inter-Agency Coordinating Task Force:** The Office of Endangered Species must work closely with other Tribal agencies, departments and enterprises to ensure cooperation and coordination of activities (see Figure 7). The purpose of this task force would be to provide an established and formal network to ensure unimpeded flow of information. In weekly or biweekly meetings, members would come together to discuss strategy, plan activities, and otherwise share information relevant to T&E species concerns.

Inter-Agency Coordinating Task Force Members

Include representatives from:

- Tribal Council
- Legal Department
- Game and Fish
- FATCO
- Tribal Forestry
- Sunrise
- Department of Planning
- Others as needed

Figure 7

Stage II: Focus on Immediate Needs

- **Conduct a quick needs assessment.** Determine all the work (i.e., surveys, reports, communication with others, staffing, funding, coordination) that needs to be done, and the time frame in which it must be accomplished.

- **Prepare a strategy.** Prioritize the work on the basis of the needs assessment.

- **Hire and train staff.** Armed with a needs assessment and a strategy, determine how many people with what technical capacity will be needed to carry out the duties. For the short term, biologist consultants may be appropriate; in the long term, however, the Tribe will probably want a botanist and a wildlife biologist on staff to provide expertise in these fields. Additional staffing requirements include technicians to conduct surveys, and a data manager to do data entry and operate the GIS system. Efforts should be made to recruit and hire Tribal members (see Appendix N).

- **Survey for priority species.** Upcoming hearings regarding the Arizona willow and spotted owl require immediate attention by the Tribe. Data must be collected on the population and habitat status of these species in order to develop the Tribe's case against the FWS. Data is also a necessary first step toward developing conservation and management plans required in order for the Tribe to maintain credibility and sovereignty over natural resource use.

- **Develop conservation and management plans for priority species.** Using the data collected, as well as guidelines from FWS and others, develop and implement conservation plans for the owl and Arizona willow. Although the Tribe already has a plan for the Mexican spotted owl, its guidelines are not viewed as credible by FWS and others because they were developed by foresters rather than biologists. Thus, these plans should be developed by biologists with a full understanding of species and habitat needs.

- **Publicize Tribe's conservation activities.** As part of its campaign to claim and exercise sovereignty, the Tribe should publicize both its successful management of past T&E species such as the Bald Eagle and Apache Trout, and its current conservation activities. Highlighting the Tribe's successful stewardship of natural resources will strengthen WMAT's case that the Tribe is a trustworthy manager of its T&E species. Target decision makers such as FWS, congress, and the public through newspaper articles, stories, flyers, etc.

- **Find funding.** Hiring staff and carrying out the work of T&E species management will require funding. While relatively few sources exist to support Tribal conservation efforts, these should be actively pursued. The more funding that can be found, the better data that can be collected. A list of possible funding sources is found in Appendix K.

Stage III: Building on Success

- **Monitor and Protect:** Once conservation and management plans are in place, the Tribe must continue to monitor species and habitat conditions. This requires surveys and data analysis to determine changes in status.

- **Visit other Indian T&E species Units:** Much can be learned by visiting other Indian tribes with established T&E species or natural resource management capabilities. Three tribes that are well known for their management capabilities are Navajo, Salish and Kootenai, and Yakima (see Appendix M and N).

- **Research:** Biological research on T&E species found on the reservation may help the Tribe determine more precisely the appropriate limits of human actions. Because little is known about most T&E species, research could help discover simple mitigation measures or regeneration techniques that will allow increased natural resource use without harm to species or habitat (see Appendix F: Activities of T&E Species Management)

- **Policy:** Conservation and recovery plans that reflect Apache values as well as the needs of species should be developed for all T&E species. In addition, a protocol for conducting an Environmental Review of projects on the reservation should be developed in order to ensure

that projects meet Tribal standards. Finally, a Tribal Wilderness Code could be designed that clearly defined the WMAT's vision of the future and a way to get there with regard to its reservation and natural resources.

- **Education and training:** The Tribe should take steps to encourage more Tribal members to gain technical expertise in biology, ecology, or wildlands management. Increasing the number of Tribal members trained in biology and survey techniques will enhance the Tribe's ability to control natural resource decisions and reduce its dependence on non-Tribal members.. The Confederated Salish and Kootenai Tribes have instituted such a training program to encourage Tribal members to pursue a Masters of Science degree in wildlife biology, wildlife management, etc., based on their general goal of having all employment positions filled with Tribal members by 1995 (see Appendix N).

IMPLEMENTING T&E SPECIES MANAGEMENT CAPABILITY

1	2	3
CREATION	**IMMEDIATE NEEDS**	**BUILD ON SUCCESS**
Designate Responsibility • Appoint Director - Biologist or Ecologist - Familiar with reservation **Establish Office:** • Location - Game and Fish? - Tribal Government? - Elsewhere? • Role - Advisory? - Regulatory? - Planning? - Monitoring? • Authority - Equal to other Agencies? - Subordinate to other Agencies? **Convene Inter-Agency Coordinating Task Force**	**Quick Needs Assessment** • Determine work that needs to be done **Prepare Strategy** • Prioritize work **Hire and Train Staff** • Biologists • Technicians • Data Manager **Survey for Priority Species** • Collect data on: - Arizona Willow - Mexican Spotted Owl **Develop Conservation & Mgmt Plans for Priority Species** • Developed by biologists **Publicize Tribe's Conservation Activities** • Recovery of Bald Eagle and Apache Trout • Reduced Annual Allowable Cut • Current Management Plans **Find funding**	**Monitor and Protect** • Conduct surveys • Map habitat **Visit other Tribal T&E Species Units** • Navaho • Yakima • Salish and Kootenai **Research** **Develop Tribal T&E species policy** • Conservation and recovery plans • Protocol for Tribal screening of projects • Tribal wilderness code **Education and Training**

Figure 8

V. Conclusion

This report has attempted to show that the WMAT can protect and enhance its sovereignty over its natural resources by developing greater threatened and endangered species management capability. By developing the capacity to collect and analyze data on T&E species, and by using that data to make natural resource use decisions that do not harm T&E species or their habitat, the Tribe can design projects internally that prevents the need of FWS from interfering in Tribal affairs.

The key to maintaining sovereignty in this case is making decisions that do not harm T&E species or their habitats. Information will assist the Tribe in choosing among projects, choosing among sites, and designing mitigation measures. However, this will not resolve all conflicts between species protection and Tribal development. Some conflicts may prove irreconcilable. However, improved information and technical capacity will arm the Tribe with the best chance it has to manage its homeland in an Apache way. In this way the White Mountain Apache Tribe can provide the best development possible to provide for its Apache people while continuing to respect and preserve the land that is its home.

Endnotes

[1]Erv Kulosa, personal interview, 1/26/93.

[2]This figure includes both operating transfers and stumpage paid by FATCO to the General Government Fund. Source: White Mountain Apache Tribe, Financial Statements and Auditor's Report: 1992 Fiscal Year. Reported in "Economic Analysis of Proposed Designation of Critical Habitat for *Salix Arizonica* (Arizona Willow) on the Fort Apache Indian Reservation", by Joseph P. Kalt, Harvard University and the Economics Resource Group. April 1993. p. 42.

[3]These figures assume a 33% to 100% shutdown of the FATCO timber mills. Because the mills are running at their minimum economically feasible capacity to support three shifts (due to recent reduction of annual allowable cut), even a small reduction in timber cut would require the layoff of the third shift. Source: "Economic Analysis of Proposed Designation of Critical Habitat for *Salix Arizonica* (Arizona Willow) on the Fort Apache Indian Reservation", by Joseph P. Kalt, Harvard University and the Economics Resource Group. April 1993. p. 15.

[4]Source: "Economic Analysis of Proposed Designation of Critical Habitat for *Salix Arizonica* (Arizona Willow) on the Fort Apache Indian Reservation", by Joseph P. Kalt, Harvard University and the Economics Resource Group. April 1993. p. 41.

[5] Source: State of Arizona . 1990. "Streams and Riparian Resources: Report of the Governor's Riparian Habitat Task Force". Executive Order 89-16. State of Arizona, Phoenix.

[6] Although the FWS biologist pointed to a lack of data as the reason for only considering a worst case scenario, this should not lead the Tribe to conclude that more data would have led to a non-jeopardy opinion. It is just as possible that more data would have still shown the project to cause unacceptable harm to the loach minnow.

[7]Personal Conversation, 2/25/93.

[8]Source: Recovery Plan for the Northern Spotted Owl-Draft. April 1992. pp. 89-90.

[9]In addition to the Yakima Indian Reservation, owl critical habitat was not designated on five other Indian reservations: Quinault Indian Reservation, Warm Springs Indian Reservation, the Grand Ronde Indian Reservation, the Round Valley Indian Reservation, and the Hoopa Valley Indian Reservation.

[10]Source: Endangered Species Act of 1973, as amended. Sec. 2(a)(1).

[11] For a discussion of the conflict, see: Ruth S. Musgrave and Mark C. Dow, "Indian Wildlife Resources and Endangered Species Management"; Robert J. Miller, "Speaking with Forked Tongues: Indian Treaties, Salmon, and the Endangered Species Act"; and Melissa K. Estes, "The Effect of the Federal Endangered Species Act on State Water Rights". (Full citations in Bibliography.)

[12] Puyallup II, 414 U.S. 44, 49 (1973).

[13] See: U.S. v. Washington, 520 F.2d 676,686 (9th Cir. 1975).

[14] Ronnie Lupe, from a letter to The Honorable Manuel Lujan, Jr. Secretary of the Interior. January 15, 1993.

[15] See: 16 U.S.C. §1536(a)(2) (1988) If the available data is inadequate for a definitive opinion, the action agency has a continuing obligation to make a reasonable effort to develop better information. However, "best data" may not be the same as "perfect data". A biological opinion can rely on "admittedly weak" information. see Richard Littell, *Endangered and Other Protected Species: Federal Law and Regulation*, pp. 59-60.

[16] The exemption process involves convening the Endangered Species Committee, made up of six members of the President's cabinet and subcabinet (Secretary of Agriculture, Secretary of the Army, Chairman of the Council of Economic Advisors, Administrator of the EPA, Secretary of the Interior, the Administrator of the National Oceanic and Atmospheric Administration, and one person from each state affected). This committee is intended to be a "recourse of last resort", in which an exemption to the ESA can be granted if 1) there are no reasonable or prudent alternatives to the agency action, 2) the project's benefits "clearly outweigh" the pro-conservation alternative, 3) the project is in the public interest, 4) the project is of regional or national significance, and 5) no irreversible or irretrievable commitment of resources has been made on the project's behalf. The Committee has only agreed to hear 4 or 5 cases since its inception in 1978, and has granted only two exemptions. Thus, this is not an option with a high probability of success.

[17] Don Barry, World Wildlife Fund. Personal Conversation, January 5, 1993.

[18] Source: Donald Barry, et al. "For Conserving Listed Species, Talk is Cheaper than We Think: The Consultation Process Under the Endangered Species Act". February 1992.

[19] Personal communication, 1/22/93

[20]In some ways, this conflict already exists. The Tribe chooses to spend as little money as possible to construct logging roads. However, the consequences of this choice are increased erosion and siltation which will eventually affect T&E fish and riparian dwellers. Thus, in the name of reducing logging costs, the Tribe is causing unnecessary ecological damage to habitat.

[21]The Natural Heritage Program is an information management system on plant and animal species and biological communities of concern. It was developed by The Nature Conservancy as an international ES database. The system can be used on its own, or fed into a GIS system.

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US Fish and Wildlife Service. April 1992. *Recovery Plan for the Northern Spotted Owl-Draft.*

US Fish and Wildlife Service. September 1991. "Loach Minnow, *Tiaroga cobitis*, Recovery Plan" Prepared by Paul C. Marsh, Arizona State University, for Region 2, USFWS, Albuquerque New Mexico.

Yaffee, Steven Lewis. 1982. *Prohibitive Policy: Implementing the Federal Endangered Species Act.* MIT Press, Cambridge Massachusetts.

Appendices

Appendix A

Interview Source List

This report benefited from numerous interviews with the following people:

On Reservation

Keith Burnett

John Caid

Lyle Carlyle

Sylvia Cates

Merilyn Endfield

Raymond Endfield

Don Geesling

Russell Henry

Jo Jojola

Dennis Jones

Erv Kulosa

Robert Locapa

Ronnie Lupe

Kelly Meyer

Charles O'Hara

Dave Reinhold

Maurie Williams

Louis Zospah

Off Reservation

Don Barry, World Wildlife Fund

Manley Begay, Harvard University

Brad Blessey, Economics Resource Group, Cambridge MA

Glen Dickens, AZ Fish and Game

Joe Elliot, biologist consultant

Leslie Fitzpatrick, FWS Ecological Services, Phoenix Arizona

Bob Gartner FWS Endangered Species Division, Washington DC

Shelly Green, The Nature Conservancy, Washington DC

Eric Hansen, Yakima Indian Nation

Mark Heitlinger, The Nature Conservancy, Tucson AZ

Dona House, Navajo Nation and The Nature Conservancy

Joe Kalt, Harvard University

Warren Poppleton, AZ State Parks Administration

Debra Prybyla, World Wildlife Fund

Sam Spillar, FWS Ecological Services, Phoenix Arizona

Sally Stefferud, FWS Ecological Services, Phoenix Arizona

Rhonda R. Swaney, Confederated Salish and Kootenai Tribes

Jonathan Taylor, Harvard University

Mike Trimble, Navajo Nation

Appendix B

ESA Definitions

Agency Action: all activities or program of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies. Typical actions include: promulgation of regulations; the granting of licenses, contracts, leases, permits, or grants-in-aid; actions directly or indirectly causing modifications to the land, water, or air. Any BIA money, support, or oversight constitutes an action.

Critical Habitat: "(i)the specific areas within the geographical area currently occupied by a species...on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
(ii) specific areas outside the geographical area occupied by the species at the time it is listed...upon determination by the Secretary that such areas are essential for the conservation of the species."

Destruction or adverse modification: means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alternation include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

Endangered Species: "any species which is in danger of extinction throughout all or a significant portion of its range..."

Jeopardy ("to jeopardize the continued existence of"): to engage in an action which would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Section 7 Consultation (inter-agency cooperation): Process by which the FWS and the action agency (i.e., BIA, Indian Health Services, etc.) determine the effects of a proposed action on T&E species and plan mitigation strategies if necessary. The process is detailed in Section II of this report under "The ESA Process and Tribal Development Activity".

Species: "any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature."

Take: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under Palila I and II, taking includes significant habitat modification actions which would injure or kill listed species, including action that would prevent the recovery of the species.

Threatened Species: "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

Appendix C

Endangered, Threatened, and Proposed Species on the Fort Apache Indian Reservation

There are 8 T&E species, 2 proposed species, and 21 candidate species found on the Reservation (31 total). The effects on endangered, threatened, and proposed species must be considered before a project's development. Candidate species are those which may in the future be considered for listing as endangered or threatened species.

Category 1 species are those for which the FWS has substantial information to support proposing to list the species as threatened or endangered. Category 2 species are those for which such information is not available but for which the FWS is seeking data on biological vulnerability and threats. Candidate species have no legal protection.

Endangered Species

- Peregrine falcon
- Bald eagle
- Razorback sucker
- Colorado squawfish

Threatened Species

- Apache trout
- Loach minnow
- Little Colorado spinedace
- Spikedace

Proposed Endangered Species

- Arizona willow

Proposed Threatened Species

- Mexican spotted owl

Category 1 Species

- Southwestern willow flycatcher
- Goodding onion

Category 2 Species

- Occult little brown bat
- Spotted bat
- Ferruginous hawk
- Northern goshawk
- Loggerhead shrike
- Narrow-headed garter snake
- Mexican garter snake
- Arizona southwestern toad
- Chiricahua leopard frog
- Flannelmouth sucker
- Roundtail chub
- Three Forks springsnail
- California Floater
- White Mountains water penny beetle
- Maricopa tiger beetle
- White Mountains paintbrush
- White Mountains clover
- Gila groundsel
- Wislizeni gentian

Adapted from February 24, 1993 letter from Arizona Ecological Services Field Office, Fish and Wildlife Service (#2-21-93-I-173) to Tribal Chairman, White Mountain Apache Tribe.

Appendix D

Partial List of Tribal Activities and Species Which Could Affect Them

Tribal Enterprises and Development	Species That Could Affect Activities
Timber	Mexican Spotted Owl, Loach Minnow, Apache Trout, Southwestern Willow Flycatcher; Goodding Onion
Sunrise Ski Resort	Arizona Willow, Goodding Onion, Apache Trout
Elk Hunt	Arizona Willow, Mexican Spotted Owl, Goodding Onion, Southwestern Willow Flycatcher,
Municipal Water Supply	Loach Minnow
Cattle Grazing	Goodding Onion, White Mountains paintbrush, Arizona Willow Flycatcher, Apache Trout, Razorback Sucker
Road Construction	Loach Minnow, Apache Trout, Goodding Onion

Appendix E

Useful References on the Endangered Species Act

Bean, Michael J. 1991. *Reconciling Conflicts Under the Endangered Species Act: The Habitat Conservation Planning Experience.* World Wildlife Fund. Washington D.C.

Brooks, Constance E. and W. Hugh O'Riordan. 1990. "The ESA: A Practitioner's Point of View". in *Natural Resources and Environment.* Vol 4, No. 4. Spring 1990.

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Activities of T&E Species Management

- **protect existing populations:** identify extent of existing populations and level of protection afforded to each; prioritize existing populations as to need or imminent need for protection; designate critical habitat; create and enforce laws and regulations affecting T&E species; discourage detrimental land and water use practices.

- **monitor existing populations:** establish standard monitoring locations, durations, and number of times each year for each T&E species population; establish and implement standard monitoring techniques and their application; establish and maintain a computerized database for tracking of monitoring and reintroduction information; determine genetic characteristics of existing populations.

- **study interactions of T&E species and other species:** direct interaction (predation, displacement); indirect interactions (mediated by other species in the area).

- **quantify habitat needs and effects of habitat modification on life cycle completion:** determine life cycle of T&E species; identify habitat needs at each life cycle stage; analyze effects of habitat modification at each life cycle stage.

- **enhance or restore habitat of T&E species:** identify target areas amenable to management; determine necessary habitat and landscape improvements; implement habitat improvements.

- **reintroduce T&E species into historic range:** identify species amenable to reintroduction; identify habitat areas suitable and appropriate for reintroduction; reintroduce species to selected areas; monitor success/failure of reintroductions; determine reasons for success/failure; rectify causes of failure as necessary and feasible and reintroduce.

- **quantify the characteristics of a self sustaining population:** determine acceptable levels of natural variation (absolute numbers, age and class structure, reproduction); determine minimum population; determine habitat needs (physical, chemical, biological community).

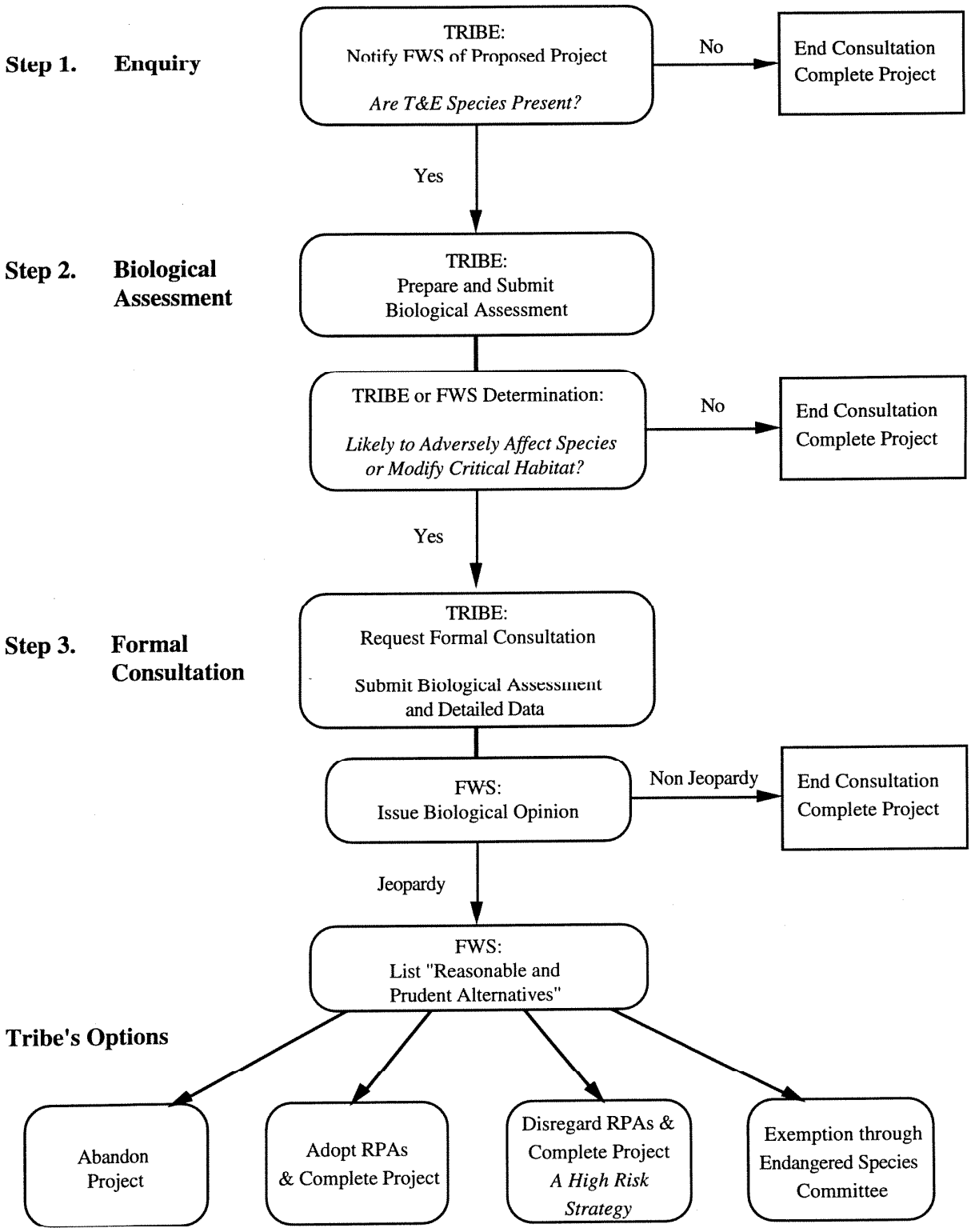
- **consider captive holding, propagation, and rearing:** determine T&E species suitable for hatchery activities; build a hatchery facility; collect and transfer T&E species to facility; develop procedures for holding and maintaining; evaluate potential techniques for

propagation; assess life-cycle requirements in hatchery environment; reintroduce when possible and appropriate.

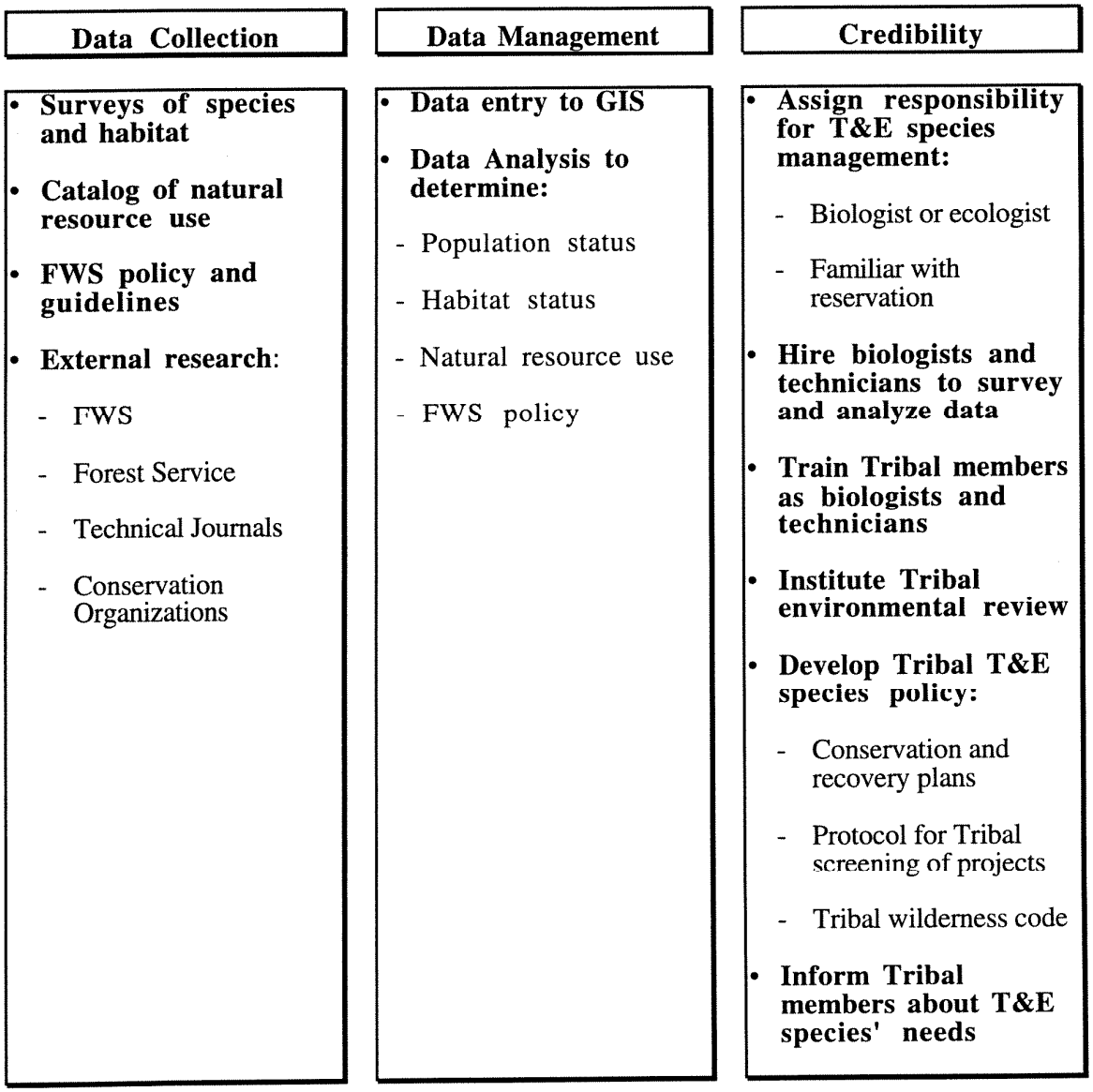
- **information and education:** describe importance of species; increase awareness among Tribal members of work being done by Tribe to protect and enhance species; local media and target campaigns; share data with FWS and other interested and responsible parties so that optimal recovery strategies can be developed and implemented.

Adapted from Paul C. March. "Loach Minnow, Tiaroga cobitis, Recovery Plan". US Fish and Wildlife Service. September 1991.

The Section 7 Consultation Process



Components of an Endangered Species Management System



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Option II **In Game and Fish**	• Maintains existing structure • Consistent mission • Enhances coordination • Precedent	• Potential conflict of interest • Inter-agency conflicts	• Work is compatible • Conflict concern is minimal • Section 7 will require compliance
Option III **Freestanding**	• Independence • Equal authority with other agencies • Easily incorporated into future Div of NR	• Duplicates technical capability of Game and Fish • Potential ineffectiveness • Potential loss of mandate	• Unaligned office • Uncertain effectiveness • Duplication of capability is unnecessary and potentially problematic

IMPLEMENTING T&E SPECIES MANAGEMENT CAPABILITY

1	2	3
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Designate Responsibility • Appoint Director - Biologist or Ecologist - Familiar with reservation **Establish Office:** • Location - Game and Fish? - Tribal Government? - Elsewhere? • Role - Advisory? - Regulatory? - Planning? - Monitoring? • Authority - Equal to other Agencies? - Subordinate to other Agencies? **Convene Inter-Agency Coordinating Task Force**	**Quick Needs Assessment** • Determine work that needs to be done **Prepare Strategy** • Prioritize work **Hire and Train Staff** • Biologists • Technicians • Data Manager **Survey for Priority Species** • Collect data on: - Arizona Willow - Mexican Spotted Owl **Develop Conservation & Mgmt Plans for Priority Species** • Developed by biologists **Publicize Tribe's Conservation Activities** • Recovery of Bald Eagle and Apache Trout • Reduced Annual Allowable Cut • Current Management Plans **Find funding**	**Monitor and Protect** • Conduct surveys • Map habitat **Visit other Tribal T&E Species Units** • Navaho • Yakima • Salish and Kootenai **Research** **Develop Tribal T&E species policy** • Conservation and recovery plans • Protocol for Tribal screening of projects • Tribal wilderness code **Education and Training**

Funding for Conservation and Endangered Species Management Activities

Funding for Tribal conservation initiatives is made difficult because most grants and other monies are designated for "states". Tribes do not qualify under this designation and so cannot apply directly for funding. This includes funding through Section 6 of the Endangered Species Act, and federal aid to states such as Federal Aid in Sport Fish and Wildlife Restoration Programs (Dingle-Johnson/Pittman-Robertson and Wollop-Breaux acts). These monies are, however, made available to Tribes through state administration. Although the WMAT may feel that accepting federal grants from states goes against government-to-government interactions as demanded by its sovereign status, I include these for information purposes only.

Money from other sources is available if the Tribe takes the time to search for it and apply. As Mike Trimble of the Navajo Natural Heritage Program said, tribes can get money if they write proposals. However, tribes generally don't have a person looking for money or capable of writing good proposals.

Finally, a Tribal employee noted that the Tribe could qualify for significantly more money if it was willing to release the information it gathered.

Below are possible sources of funding categorized by type of source.

Foundations

- National Fish and Wildlife Foundation
- There are probably many others but my source was reluctant to reveal them because he didn't want to add to the competition for funds. He recommended looking in the *Conservation Directory* and in the *Grant Guide* under "environment", "conservation", and "minorities".

Conservation Organizations

- **The Nature Conservancy**: Sally Grove, Agency Relations: 703/841-5300 ext. 2718. As part of its comprehensive endangered species management system known as the Natural Heritage Program, The Nature Conservancy has a strong network of funding connections. The Agency Relations office sends out numerous one page funding alerts to inform its members about possible funding opportunities for all types of conservation activities.
- **World Wildlife Fund:** Debra Prybyla, Hoopa Tribe Conservation partnership: 202/778-9686. WWF has developed a partnership with the Hoopa Valley Tribe to assist the Tribe in preparing an Integrated Resource Management Plan. To date, the first phase, a

needs assessment, has been completed. To complete the second phase, an actual IRMP, WWF intends to seek $200,000 to $300,000 on behalf of the Tribe. WWF might be available for similar arrangements, or could be a source of funding or funding information.

BIA

- Wildlife and Parks line item

FWS:

- **Federal Funding Division:** Currently there is no funding assistance for Indian conservation programs. However, FWS hopes to get funding for this in the 1993 fiscal year budget.
- **Contact people:**
    - Columbus Brown: FWS Endangered Species Department, Federal Aid Office, Washington DC. 703/358-2156
    - Conrad Fjetland or Jim Hutchinson: FWS Ecological Services, Albuquerque NM. 505/766-2323

Bureau of Reclamation

- Grants are available for wetlands and water projects

US Forest Service

- **Cooperative Research Project:** Yakima received $98,000 to do radio telemetry mapping of owl habitat range.

Environmental Protection Agency (EPA)

- Ms. Maureen J. Ross, Grants Policy Specialist: 202/260-9297

State of Arizona

The State of Arizona pursues Memorandums of Understanding (MOU) and Supplemental Cooperative Agreements between the State and Tribes in which both parties agree to cooperate in conservation activities using mutual resources for mutual benefit. An MOU initiates a partnership

that allows for technology transfer and management support from the State to the Tribe. From this process, the following monies are available through the State:

- **Department of Agriculture:** awards ESA Section 6 money for plant research; expects $25,000-$30,000 this year.
- **Arizona Game and Fish:** Federal Aid Coordinator, Glen Dickens 602/789-3522
    - Heritage Initiative for sensitive species: $1.2 million. One tribe was awarded $125,000 to conduct an inventory of riparian birds.
    - Wetlands Conservation Act: The Hicorea Tribe received a grant from this fund in 1992.
- **Arizona State Parks Administration:** Warren Poppleton 602/542-6977
    - Land and Water Conservation Fund: a federal grant-in-aid program with a total budget of $2.5 million. Although tribes are eligible to apply through the state, only one tribe, the Cocopah, has recently applied for this money.
    - State Lake Improvement Fund: $2-4.5 million available. This grant requires tribes to have a sponsor for the money. The sponsor is responsible for seeing that the project is completed and maintained.
    - Heritage Fund: $5.5 million. The Hualapai have recently received funding through this fund.
    - DJ/PR: States will provide this money to Tribes as a matching grant that requires 75% contribution by Tribes, often in the form of in-kind service.

D R A F T 7/15/92

THE NATIVE AMERICAN POLICY

OF THE

U.S. FISH AND WILDLIFE SERVICE

INTRODUCTION

The U.S. Fish and Wildlife Service (Service) is looking ahead to the conservation challenges of the 21st century by establishing new priorities and determining where to focus finite management resources to do the greatest good. As part of a new vision, the Service is emphasizing the preservation of ecological systems as a whole and the protection of the diversity of species within them. To accomplish its objectives with maximum efficiency, the Service is forming partnerships with other government agencies, Native American governments, foreign nations, conservation groups, and private citizens to deal with problems where the Service's reach is limited.

The Native American community is an important sector of society with which the Service must maintain and improve its working relationships to better manage fish and wildlife resources. This Native American Policy (Policy) helps define that relationship.

The following definitions help to clarify the guidance encompassed by this Policy:

DEFINITIONS

Agreements - Documents approved by two or more parties that identify their roles and responsibilities in achieving mutual objectives (e.g. Memoranda of Agreement, Memoranda of Understanding, Cooperative Agreements, Grants, and Contracts).

Co-Management - Two or more entities, each having recognized management responsibility, working together to actively protect, conserve, enhance, or restore fish and wildlife resources.

Fish and Wildlife Resources - All fish and wildlife, including invertebrates, and their habitats.

Fish and Wildlife Resource Management - All activities that directly or indirectly contribute to the preservation, utilization, maintenance, mitigation, and enhancement of fish, wildlife, and their habitats.

Lands - Includes all uplands, wetlands, and open waters such as streams, lakes, estuaries, and bays.

Law Enforcement Officers (Native American) - Native American enforcement personnel specifically empowered primarily or secondarily to enforce fish and wildlife laws (e.g. rangers, conservation officers, game wardens, fire chiefs, and police officers).

Native Americans - American Indians in the conterminous United States and Alaska Natives (including Aleuts, Eskimos, and Indians).

Native American Governments - "Federally recognized" Native American governmental bodies such as tribes, nations, bands, rancherias, pueblos, village councils and traditional councils.

Reservations - Lands set aside or reserved by treaty, administrative action, legislation, or litigation for the communal use by Native Americans. Properties located outside the contiguous boundaries of reservations that are held in fee title by Native Americans as private property are generally not considered to be reservations.

Traditional Areas - Lands where usual and accustomed or customary and traditional activities are or were practiced by Native Americans.

Trust Responsibility - Consistent with their stewardship, management, and regulatory responsibilities, Federal agencies are required to actively protect Native American trust assets as directly or indirectly defined or referenced in treaties, legislation, administrative decisions, and court proceedings. Federal agencies are not authorized to take actions that would knowingly or inadvertently impact trust assets. The identification and quantification of trust assets is recognized as an ongoing and evolving process.

PREAMBLE

The Service has developed and adopted this Policy to help accomplish its mission and to concurrently participate in fulfilling the Department of the Interior's trust responsibilities to assist Native Americans in protecting, conserving, and utilizing their reserved, treaty guaranteed, or statutorily identified trust assets. The Service recognizes the sovereign status of each Native American government and the government-to-government interactions that such status demands. This Policy is firmly consistent with the overarching Federal policy of supporting Native American self-determination.

The Service's mission is "...To provide leadership to achieving a national net gain of fish and wildlife and the natural systems which support them." Native American governments have interests in managing fish and wildlife resources to protect Federally reserved tribal rights and to preserve opportunities for historical and traditional uses by Native Americans. To meet the convergent objectives of the Service and Native American governments, the Service will utilize a holistic, multidisciplinary approach to managing fish and wildlife resources and will develop and implement partnerships with involved Native American governments. Emphasis upon this holistic, co-management approach to fish and wildlife management will be mutually beneficial to the Service and Native American governments in addressing common fish and wildlife management goals and objectives.

The Service has a long history of working with Native Americans in the management of fish and wildlife resources. The Service will continue to expand this relationship with Native Americans by improving communication and cooperation, providing fish and wildlife management expertise and assistance, and respecting and utilizing the traditional knowledge, experience, and perspectives of Native Americans in the management of fish and wildlife resources.

This Policy is intended to be flexible and dynamic to provide room for the partnerships between the Service and Native American governments to evolve. The working relationships between the Service and Native American governments will be generally consistent nationwide; however, the specifics of implementing this Policy may vary according to the legal basis for each relationship. For example, the Service's interaction with Alaska Natives is greatly influenced by the provisions of the Alaska Native Claims Settlement Act and the Alaska National Interest Lands Conservation Act. Elsewhere, the Service's involvement with Native Americans is guided primarily by reserved right doctrines, Executive Orders, judicial mandates, and specific treaties between the Federal government and Native American governments.

Successful implementation of this Policy will be accomplished through the collective efforts of all components of the Service in consultation and cooperation with Native Americans. For major joint initiatives, the Service will offer to enter into formal agreements, developed by both parties, that will

clearly identify the roles, responsibilities, and obligations of the Service and each involved Native American government. This Policy applies to all Service employees in discharging official duties that affect Native American interests.

Accomplishing the objectives of this Policy is contingent upon prevailing legal, procedural, workforce, and monetary constraints. This Policy does not negate or supersede the diverse and numerous goals, objectives, and mandates of the Service.

The following policy statements provide the framework within which the Service will establish cooperative relationships with Native American governments in the conservation of fish and wildlife resources. While the major components of this Policy are aimed at cultivating and maintaining effective partnerships between the Service and Native American governments, the ultimate goal is to effect long-term conservation of fish and wildlife resources. This goal has been eloquently expressed by many Native Americans in the following statement:

> We did not inherit this Earth or its natural resources from our ancestors, we are only borrowing them from our childrens' children and their children. Therefore, we are duty-bound and obligated to protect them and use them wisely until such time that they get here, and then they will have the same obligations.

GOVERNMENT-TO-GOVERNMENT

General Statement

The Service will maintain a government-to-government relationship with Native American governments and will recognize and support their right to self-determination and self-government. The Service will work directly with Native American governments and will comply with legislative mandates, treaty rights, trust responsibilities, and respect Native American cultural values when planning and implementing programs.

On-Reservation Lands

The Service will recognize appropriate Native American governments as the primary parties for making fish and wildlife resource management policy and for managing fish and wildlife resources on Native American reservations.

Off-Reservation Lands

The Service will recognize and support the rights of Native Americans to utilize fish and wildlife resources on traditional areas where there is a recognized basis for such use. The Service will recognize that certain Native American governments have treaty-guaranteed or reserved rights to co-manage off-reservation fish and wildlife resources. In such cases, the Service will cooperate with Native American governments to ensure that they continue to be legitimate co-managers of fish and wildlife resources.

SELF-DETERMINATION

Support for Self-Determination

The Service supports the rights of Native Americans to be self-governing, to manage or co-manage their trust fish and wildlife resources, and to protect their Federally recognized rights on and off their lands and waters.

Indian Education and Self Determination Act (Public Law 93-638, as amended)

The Service will work with Native Americans in developing fair and effective rules and regulations to implement the provisions of the Indian Education and Self Determination Act. The Service will cooperate with Native Americans to identify and facilitate the transfer of contractible Service programs or portions of programs to Native Americans. The Service will review and facilitate the efficient implementation of contracting processes and funding mechanisms.

COMMUNICATION

Consultation

The Service will consult with Native American governments on all fish and wildlife resource issues in which Native Americans have a vested interest. The goal is to keep Native American governments informed regarding Service activities and initiate frequent exchanges of information on matters of mutual interest and concern.

Communication with other Agencies

The Service will facilitate communication among Native American governments, States, and other Federal agencies to ensure that issues of common interest and concern are discussed. This may include taking a pro-active role in providing the biological or managerial expertise to facilitate the resolution of conflicts about fish and wildlife resource issues.

Working Relationships

The Service will take appropriate steps to establish processes to work directly and effectively with Native American governments on fish and wildlife programs affecting Native American lands and other lands where traditional uses and rights exist.

FUNDING

Existing Funding Sources

The Service will facilitate Native American access to Federal and non-Federal funding sources that are currently available to Native American governments for fish and wildlife resource management activities.

New Funding Sources

The Service will work with Native American governments to develop new Federal and non-Federal funding mechanisms to address tribal fish and wildlife resource management needs.

CULTURE/RELIGION

Consultation

The Service will involve and incorporate the concerns of Native American governments in all Service actions that may affect tribal fish and wildlife, cultural, or religious assets, including archaeological sites. The Service will be guided in this respect by such legislation as the American Indian Religious Freedom Act, the National Historic Preservation Act, and the Archaeological Resources Protection Act.

Reasonable Access

The Service will provide Native Americans with reasonable access to Service managed or controlled lands and waters for exercising their ceremonial, medicinal, and traditional activities and rights. The Service will allow these uses if the activities do not prevent the Service from accomplishing its mission and meeting site-specific management objectives.

Animal Parts

The Service will expedite the processing and distribution of certain animal parts, such as eagle feathers, for recognized religious, ceremonial, and cultural purposes in accordance with Federal laws. Timeliness of processing and distributing animal parts will be contingent upon animal part availability and on the needs of the Service to conduct required scientific and law enforcement investigations.

LAW ENFORCEMENT

Cooperation

Service law enforcement agents will assist with the cooperative implementation of Federal wildlife laws including the Lacey Act and statutes regarding non-Native American hunting and fishing trespass on Native American lands. The Service will encourage the use of cooperative law enforcement activities as integral components of Native American, Federal, and State co-management agreements relating to fish and wildlife resources. The Service will assist in the formulation of the law enforcement elements related to co-management agreements. Upon request, the Service will evaluate Native American law enforcement capabilities and, if warranted, provide recommendations for improving such capabilities.

Coordination

The Service will coordinate with Native American law enforcement officers regarding law enforcement operations on or adjacent to Native American lands, as appropriate. The Service will assist Native American governments in the coordination of appropriate law enforcement investigations that require the use of the Federal court system. The Service will also provide liaison between Native American governments and the U.S. Department of the Interior Solicitor.

Development of Fish and Wildlife Codes

The Service will assist Native American governments with the development of comprehensive fishing, hunting, and conservation codes.

TECHNICAL ASSISTANCE

Technical Expertise and Assistance

The Service will make available technical expertise from all Service program areas to assist Native American governments in the management of fish and wildlife resources. The Service will advise Native American governments about the kinds of technical assistance that it can make available to them. Technical assistance priorities will be developed with input from affected Native American governments.

Agreements

The Service will develop partnership agreements with Native American governments to work together and exchange technical expertise regarding matters of mutual interest.

Information Transfer

The Service will provide access to technical information from such sources as technical assistance offices, other field offices, research centers, and fish health laboratories. The Service will help identify and refer Native American governments to other agencies where it is appropriate for those agencies to provide the requested technical assistance.

TRAINING AND EDUCATION

Service Sensitivity Training

The Service will work with Native American governments to help Service employees improve their understanding and appreciation of Native American traditional, cultural, and religious values and practices, natural resource values, treaty and other Federally reserved rights, and appropriate law enforcement policy issues.

Native American Access to Service Training

The Service will provide equal consideration for Native American governments as for other government agencies in its fish and wildlife resource training programs.

Law Enforcement Training

The Service will make its law enforcement expertise and capabilities available to Native American governments. The Service will provide guidance and assistance in developing, maintaining, or improving Native American fish and wildlife law enforcement programs. The Service's basic and refresher fish and wildlife law enforcement training courses will continue to be available to Native Americans.

Professional Development

The Service will facilitate the education and development of Native American fish and wildlife professionals by providing innovative educational programs and on-the-job training opportunities. The Service will establish partnerships and cooperative relationships with Native American educational institutions to assist in such areas as developing natural resources curricula or implementing cooperative education programs. The Service will also ensure that Native American schools and children are included in its environmental education outreach programs.

Work Force Diversification

The Service will develop proactive, innovative, and aggressive recruitment programs to attract the best qualified personnel to develop and maintain a Service workforce that is representative of the cultural diversity of the nation. Qualified Native Americans will be actively encouraged to apply for jobs with the Service. These pro-active recruitment efforts apply <u>especially</u> where the Service is involved in managing or co-managing fish and wildlife resources in which Native Americans have a primary management authority.

Education of the General Public

The Service will work with Native American governments to inform and educate the public about Native American fish and wildlife related treaty and other Federally reserved rights, laws, regulations, and programs in which the Service and Native American governments are jointly involved.

NATIVE AMERICAN WORKING GROUP
U.S. FISH AND WILDLIFE SERVICE

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1451 Green Road, Ann Arbor, MI 48105
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Appendix M

Navajo Fish & Wildlife Department

Natural Heritage Program

NATURAL HERITAGE PROGRAM
NAVAJO FISH & WILDLIFE DEPARTMENT
P.O. BOX 1480
WINDOW ROCK, NAVAJO NATION, ARIZONA 86515
(602) 871-6472

August 1992

The Navajo Natural Heritage Program (NHP) was established in 1984 through a cooperative agreement between the Navajo Nation and The Nature Conservancy (TNC). It is part of TNC's nationwide network of natural heritage programs and is the only Native American-based program. Funding was initially provided by TNC, then by a grant from the Ford Foundation. Since 1988 funding has been provided through the Indian Self-Determination Act (Public Law 93-638) and administered by the Bureau of Indian Affairs. As a section within the Navajo Fish and Wildlife Department the NHP is fully integrated into the Navajo tribal government. Seven staff members are currently employed by the PL 93-638 monies - a manager, botanist, zoologist, environmental reviewer, data manager, wildlife technician, and secretary. Several additional staff members are employed by other contract monies obtained and administered by the NHP.

The NHP is an information management system on plant and animal species and biological communities of concern on the Navajo Nation. Its purpose is to collect, manage, and disseminate biological and ecological information for land use planning. Information is stored in a databank composed of a computerized database, manual files, maps and a library. The databank format, as well as certain NHP operational procedures, follow a standardized methodology established by TNC for natural heritage programs.

The Navajo Nation covers over 25,000 square miles with biotic communities ranging from subalpine conifer forests to desert scrub. Nine federally endangered, threatened or proposed species reside on the Navajo Nation, and five species or subspecies are found only on the Navajo Nation. Because only a small percentage of the Navajo Nation has been adequately inventoried and because the biotic environment is dynamic, the NHP databank is continually expanding and under revision.

Some of NHP's major services and accomplishments are:

- Inventory for new populations of species and communities of concern and monitoring of known populations. 570 occurrences have been recorded.
- Responding to 278 requests for information since November 1990 on species and communities of concern from land use planners and developers.
- Providing environmental review for 430 projects since November 1989 for consideration by the Resources Committee of the Navajo Nation Council.
- Developing the most comprehensive natural resource database available on the Little Colorado River Basin.
- Cooperating with Arizona State University to study the life history and ecology of the federally endangered humpback chub.
- Cooperating with the Smithsonian Institution to initiate a Conservation Education Program for Navajo students and employees.
- Developing a Biological Survey Section to provide low cost biological surveys to Navajo agencies, chapters and other entities.
- Facilitating the development of a Navajo Nation Endangered Species List.
- Assisting local Navajo initiatives for land restoration.
- Working to establish a project to inventory plants of the Navajo Nation and develop a Navajo Nation herbarium and flora checklist.
- Developing a list of priority sites for the establishment of conservation areas.

RCF-014-91

RESOLUTION OF THE RESOURCES COMMITTEE
OF THE NAVAJO NATION COUNCIL

Approval of the Navajo Nation Endangered Species List

WHEREAS:

1. The Resources Committee was reaffirmed and continued as a standing committee of the Navajo Nation Council per the Title Two (II) Amendments and Reorganization of the Nation Nation Government (2 NTC § 691, CD-68-89); and

2. The Navajo Tribal Code, 17 N.T.C. section 500(8), defines an 'endangered species' as "any species of fish or wildlife whose prospects of survival or recruitment within the Navajo Nation are in jeopardy or are likely within the foreseeable future to become so"; and

3. The Navajo Tribal Code, 17 N.T.C. section 507, emphasize the importance of endangered species and establishes a penalty for the disturbance of these species; and

4. Pursuant to 17 N.T.C. section 507(a), the Navajo Fish and Wildlife Department, "on the basis of investigations concerning wildlife, and other available scientific and commercial data, and after consultation with wildlife agencies in surrounding states, appropriate federal agencies, and other interested persons and organizations" has compiled a list of endangered species within the Navajo Nation. See Exhibit A "Endangered Species List for the Navajo Nation"; and

5. Pursuant to 17 N.T.C. section 507(b), the Director, Navajo Fish and Wildlife Department is charged with the responsibility to review the Navajo Nation list of endangered species every two years, and make recommendations for appropriate additions or deletions to the Resources Committee; and

6. Pursuant to 23 N.T.C. section 201(4), the Fish and Wildlife Department is responsible for the gathering of technical data in the fields of fishery and wildlife biology, and as such, is continually updating information on listed species and species which may be endangered; and

7. It best serves the intent of the law that at such time the status of a species changes that it be added to or deleted from the "Endangered Species List for the Navajo Nation".

NOW THEREFORE BE IT RESOLVED THAT:

1. The Resources Committee of the Navajo Nation Council hereby approves the "Endangered Species List for the Navajo Nation", attached as Exhibit A.

2. The Director shall update the "Endangered Species List for the Navajo Nation" at the time sufficient information is gathered to make such determination and report the same to the Resources Committee, pursuant to Title 17, N.T.C section 507(a).

C E R T I F I C A T I O N

I hereby certify that the foregoing resolution was duly considered by the Resources Committee of the Navajo Nation Council at a duly called meeting at Window Rock, Navajo Nation (Arizona), at which a quorum was present and that same was passed by a vote of 7 in favor, 0 opposed and 1 abstained, this 14th day of February, 1991.

Elmer Milford, Chairman

Motioned: Frank Guerro
Seconded: Samuel Yazzie

Appendix N

Salish and Kootenai Natural Resources Department

- An Overview of Tribal-Federal Wildlife Management Activities: Flathead Indian Reservation
- Proposal for Establishment of a Wildlife Biologist Trainee Position with the Confederated Salish & Kootenai Tribes

DIVISION OF NATURAL RESOURCES
NAVAJO FISH & WILDLIFE DEPARTMENT

ENDANGERED SPECIES LIST
for
The Navajo Nation

GROUP 1 Those species or subspecies that no longer occur on the Navajo Nation.

GROUP 2 Any species or subspecies which is in danger of being eliminated from all or a significant portion of its range on the Navajo Nation.

GROUP 3 Any species or subspecies which is likely to become an endangered species, within the foreseeable future, throughout all or a significant portion of its range on the Navajo Nation.

GROUP 4 Any species or subspecies for which the Navajo Fish & Wildlife Department does not currently have sufficient information to support their being listed in Group 2 or Group 3 but has reason to consider them. The NF&WD will actively seek information on these species to determine if they warrant inclusion in a different group or removal from the list.

The Navajo Fish & Wildlife Department shall determine the appropriate group for listing a species or subspecies based on any of the following factors:

A. The present or threatened destruction, modification, or curtailment of its habitat or range;

B. over-utilization for commercial, sporting, scientific, or educational purposes;

C. disease or predation;

D. the inadequacy of existing regulatory mechanisms; or

E. other natural or manmade factors affecting its continuous existence.

AN OVERVIEW OF TRIBAL-FEDERAL WILDLIFE MANAGEMENT ACTIVITIES FLATHEAD INDIAN RESERVATION

Personnel:

The U. S. Fish and Wildlife Service provided technical assistance to the Confederated Salish and Kootenai Tribes during the period of 1962-1977 in the form of a wildlife biologist stationed at the Service's Billings office. Prior to 1962, the Tribes received technical assistance from the staff of the National Bison Range. In 1975, the Tribes expressed a need to hire a wildlife biologist to conduct wildlife management planning on the Reservation.

The primary goals of this effort were to be 1) the professional evaluation of impacts of ongoing and plannned forestry activities upon wildlife populations, and 2) inventory and compilation of data necessary to produce a Reservation Forestry Wildlife Management Plan. To accomplish these tasks, the Bureau of Indian Affairs and the Tribes entered into an agreement in which the Bureau agreed to 1) provide funds to reimburse the Tribes for the entire cost of providing professional consultation and data collection, 2) provide technical direction, 3) provide basic resource data already available in the files and records, and 4) provide office working space.

The responsibilities of the Tribes were to 1) hire a professional wildlife biologist, 2) determine relative abundance, distribution and status of indigenous wildlife, 3) gather and analyze field data relating to condition and trend of wildlife populations and their habitat, 4) determine patterns of habitat use by big game, 5) propose species management practices designed to maintain optimal levels of wildlife populations, 6) assure that wildlife resources receive consideration under multiple-use principles, 7) explore ways by which tribal management objectives could be reached through practices developed in harmony with other resource programs, 8) prepare periodic technical reports, and 9) receive technical direction from the Bureau of Indian Affairs in performing the stated duties and coordinate activities with existing cooperative agreement with the U. S. Fish and Wildlife Service.

The position of Tribal Wildlife Biologist was advertised both locally and nationally (advertisement placed in the Wildlife Society publications in October of 1976). Robert Klaver was selected for the position from among the sixty applicants who applied. He commenced in the position in January of 1977.

In May of 1978 the functions of the Tribal Wildlife Biologist were transfered to the Bureau of Indian Affairs. The Bureau hired James Claar as the Supervisory Wildlife Biologist and retained Robert Klaver as the Assistant Wildlife Biologist. They continued to occupy these positions until 1986 when Mr. Klaver transfered to the Portland Area Office of the BIA. Mr. Claar became the BIA's Environmental Coordinator at the Flathead Agency in March of 1988.

At that time, the Tribes assumed wildlife management responsibilities under a PL 638 Contract. Dr. John Ratti of the University of Idaho was contracted as a wildlife management and hydroelectric consultant. In May of 1988, the Tribes hired Parke Moore as their Wildlife Program Manager. Mr. Claar was reassigned to the Portland Area Office until he transfered to the U. S. Forest Service in December of 1988. Mr. Moore resigned his position in May of 1989, and Dale Becker was hired to fill it in June of that year. Susan Ball was also hired to fill the position of Assistant Wildlife Biologist in June of 1989. At present, the Tribal Wildlife Management Program is operated with the staff of two full-time wildlife biologists, one wildlife biologist trainee (William Swaney) and two technicians shared with the Tribal Wildland Recreation Program. The Wildlife Trainee is employed under a Tribal education and employment program in which Tribal members are assisted with financial aid during their academic studies in exchange for permanent positions in their fields of study at the time that they complete their academic work.

Goal:

The goal of the Tribal Wildlife Management Program is to protect, enhance and manage wildlife resources and wildlife habitats to provide for viable populations of all wildlife species present on the Reservation.

Objectives:

Objectives of the Tribal Wildlife Management Program are as follows:

1) Completion and implementation of a Management and Mitigation Plan for Kerr Dam in coordination with the Bureau of Indian Affairs, the Montana Department of Fish, Wildlife and Parks, the U. S. Fish and Wildlife Service, and the Montana Power Company;
2) Inventory and monitoring of wildlife populations and design and implementation of regulations necessary to insure stable populations of terrestrial wildlife species throughout the Reservation;
3) Participation in evaluations of the effects of human activities and resource management activities including forestry, range management, planning, environmental assessment of construction and development projects upon wildlife and wildlife habitat;
4) Compilation of a Reservation Wildlife Management Plan and the Wildlife Section of a Tribal Comprehensive Plan;
5) Participation in interagency and technical working groups to insure consideration of Tribal Treaty rights and other Tribal interests in management decisions of other agencies;
6) Development of funding opportunities to achieve financial support for wildlife and wildlife habitat research and management;
7) Utilization of the media to communicate program goals and activities to Tribal members and the general public; and
8) Development and maintenance of working relationships with academic institutions to facilitate research on selected Reservation wildlife and topics of special concern.

GOALS AND OBJECTIVES FOR THE WILDLIFE MANAGEMENT PROGRAM, FY 1993

PERSONNEL: 1 WILDLIFE PROGRAM MANAGER, 2 WILDLIFE BIOLOGIST IIs, 1 WILDLIFE BIOLOGIST I, 1 WILDLIFE BIOLOGIST TRAINEE, AND 3 WILDLIFE TECHNICIANS (PART-TIME)

PROGRAMMATIC GOAL: The goal of the Tribal Wildlife Management Program is the protection, enhancement and management of wildlife resources and habitats to provide for viable populations of all wildlife species present on the Reservation.

OBJECTIVES

I. Hydro-electric Mitigation
   - A. Kerr Mitigation
     1. Continuation of inter-agency efforts to complete settlement
     2. Continuation of planning efforts for habitat acquisition and enhancement projects
   - B. Libby-Hungry Horse Mitigation
     1. Participation in the Montana Trust Fund Advisory Committee
     2. Participation in technical advisory groups on wildlife and habitat mitigation

II. Monitoring of Terrestrial Wildlife
   - A. Design and implementation of population surveys
     1. Big game
        a. Aerial surveys of big game populations and habitat on the Reservation
        b. Evaluation of populations within Wildlife Management Units
        c. Evaluation of potential translocation projects involving bighorn sheep and elk
        d. Development of management guidelines for all species
     2. Waterfowl
        a. Coordination of seasonal aerial surveys with the U. S. Fish and Wildlife Service and the Montana Department of Fish, Wildlife and Parks
        b. Investigation of causes of low recruitment
        c. Operation of hunter harvest check stations and analysis of harvest data
        d. Development of management guidelines for all species
     3. Upland gamebirds
        a. Seasonal surveys along established routes
        b. Operation of hunter harvest check stations and analysis of harvest data
        c. Evaluation of survey techniques for mountain grouse and gray partridge
        d. Evaluation of potential for reintroduction of Columbian sharp-tailed grouse
        e. Development of management guidelines for all species

4. Endangered and Threatened Species
   a. Aerial and ground surveys of breeding and wintering bald eagles
   b. Aerial and ground surveys for breeding peregrine falcons
   c. Aerial surveys for northern gray wolves and maintenance of records of incidental observations
   d. Aerial and ground surveys of grizzly bear use of McDonald Peak and maintenance of records of incidental observations
   e. Development of management guidelines for all species
5. Sensitive and nongame species
   a. Continuation of osprey reproduction monitoring efforts
   b. Continuation of common loon monitoring efforts
   c. Establishment of a breeding raptor data base
   d. Continued cooperation with the Owl Research Institute to develop population data bases on grassland and forest owls
   e. Continuation of breeding bird surveys to determine local population status
   f. Initiation of surveys to determine local status of shorebird populations
   g. Development of management guidelines for all species
6. Furbearers
   a. Development of trend surveys of local populations
   b. Development of management guidelines for all species

III. **Wildlife Regulations and Enforcement**

A. Development and implementation of regulations necessary to insure stable populations of wildlife
   1. Evaluation and adjustment of member and non-member regulations, as necessary
   2. Development of technical training programs for Tribal game wardens

IV. **Resource Management**

A. Forest management
   1. Cooperation with Tribal and BIA Forest Management and other Natural Resource Department programs to evaluate timber management impacts upon wildlife and wildlife habitat and development of effective mitigation strategies
   2. Provision of input regarding wildlife concerns with forest management planning
   3. Continuation of development of a forest road management plan
   4. Analysis of wildlife data collected as part of the Continuous Forest Inventory

B. Range management
   1. Cooperation with Tribal Land Services Program personnel to evaluate impacts of range management activities upon wildlife and wildlife habitat and develop effective mitigation strategies
   2. Provision of input regarding wildlife concerns with range management planning

C. Planning
   1. Preparation of a Reservation Wildlife Management Plan, including policy statements
   2. Preparation of wildlife sections of the Comprehensive Resource Plan
   3. Revision the Flathead Indian Reservation Grizzly Bear Management Plan
   4. Development of Tribal policy statements on wildlife issues

D. Environmental assessment
   1. Environmental assessment of wildlife and habitat impacts associated with projects administered or regulated by Tribal programs
   2. Environmental assessment of wildlife and habitat impacts associated with projects on the Reservation and on aboriginal lands

E. Habitat inventory
   1. Cooperation with the U. S. Fish and Wildlife Service, NRD Water Management Program and NRD Water Quality Program toward completion of a Reservation Wetland Inventory Project
   2. Development of inventory plans for old-growth forest habitat in cooperation with Tribal and BIA Forestry programs
   3. Development of plans to inventory and classify riparian habitat in coordination with other NRD programs

F. Off-Reservation treaty rights
   1. Evaluation of impacts of proposed activities upon wildlife and wildlife habitat in aboriginal areas utilized by Tribal members under the Hellgate Treaty of 1855

V. Research and Special Projects

A. Avian recruitment research
   1. Cooperation with University of Montana research of predation impacts upon waterfowl and ground-nesting bird recruitment

B. Grizzly bear research
   1. Cooperation with U. S. Fish and Wildlife Service research on grizzly bear habitat fragmentation
   2. Continuation of habitat analysis and Cumulative Effects Model preparation

C. Peregrine Falcon Reintroduction
   1. Continuation of reintroduction project

VI. Interagency Activities

A. Participation in several interagency wildlife management and technical advisory groups that deal with endangered and threatened species management, hydroelectric mitigation, Treaty rights, and regional habitat management
   1. Endangered and Threatened Species
      a. Montana Bald Eagle Working Group

b. Montana Peregrine Falcon Working Group
c. Northern Continental Divide Ecosystem Grizzly Bear Management Subcommittee
d. Grizzly Bear Cumulative Effects Model Technical Group

2. Hydroelectric Mitigation
   a. Kerr Dam Mitigation Wildlife Technical Group
   b. Kerr Dam Mitigation Policy Group
   c. Montana Wildlife Mitigation Trust Fund Advisory Committee
   d. Columbian Sharp-tailed Grouse Technical Group
   e. Montana Wildlife Mitigation Habitat Advisory Group
   g. Columbia Basin Fish and Wildlife Authority Wildlife Committee
3. Waterfowl and Upland Gamebirds
   a. Flathead Canada Goose Management Committee
   b. Flathead Indian Reservation Waterfowl and Upland Gamebird Technical Committee
4. Nongame and Sensitive Species
   a. Montana Watchable Wildlife Working Group
   b. Lynx, Fisher and Wolverine Working Group

VII. **Development of Financial Support**

A. Preparation of funding proposals for research, inventory, habitat enhancement and environmental education projects.
B. Pursuit of Federal Aid in Wildlife and Sport Fish Restoration funds with other tribes in a national effort coordinated by the Native American Fish and Wildlife Society

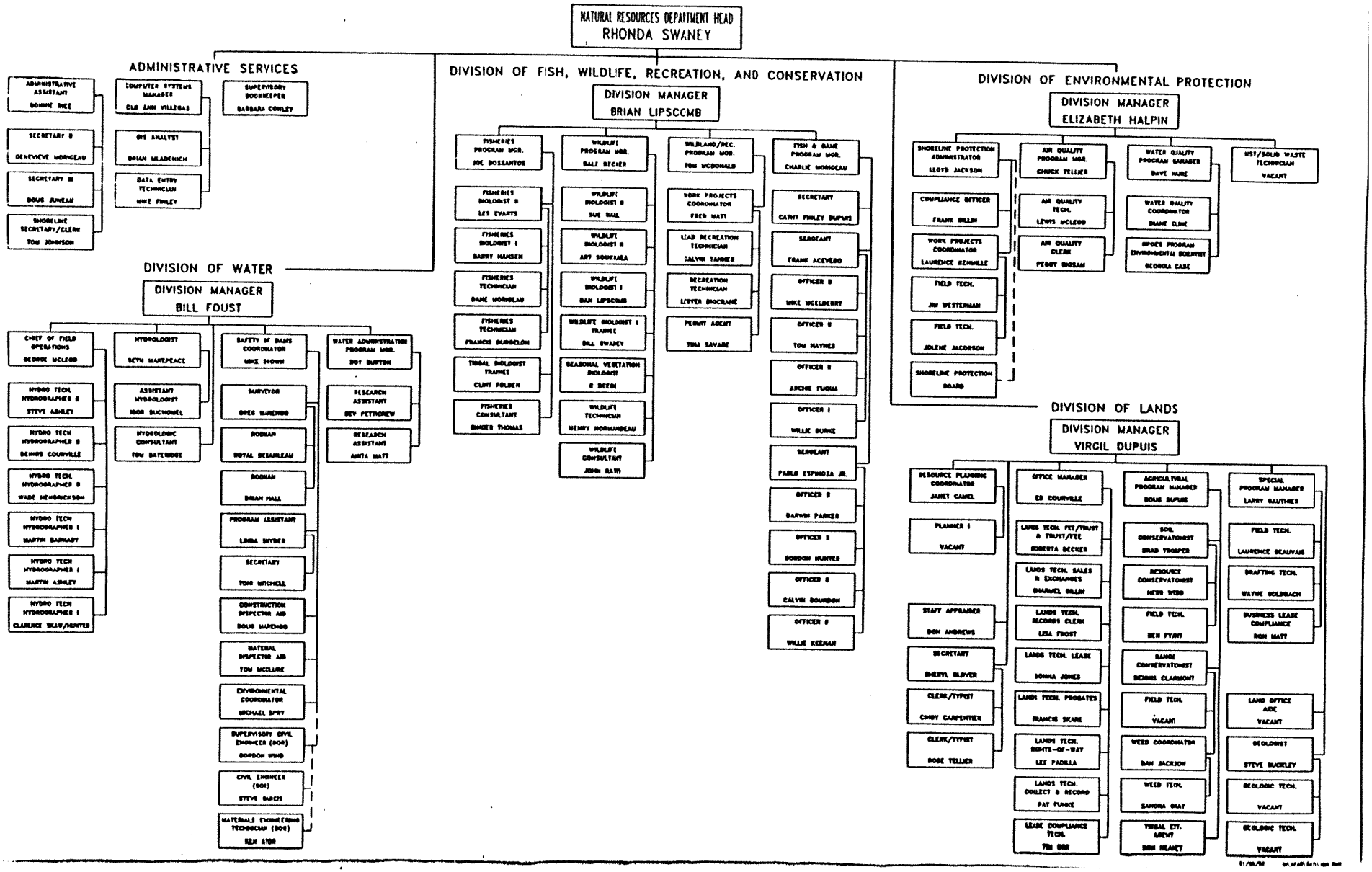
VIII. **Public Relations/Information**

A. Utilization of the media as appropriate, to communicate Program goals and activities to the public
B. Coordination of an Open House for the Tribal Natural Resources Department

IX. **Cooperation With Academic Institutions**

A. Continuation of working relationships with the Salish-Kootenai College, the University of Montana and the University of Idaho
B. Development of cooperative projects with local elementary and high schools

NATURAL RESOURCES DEPARTMENT



PROPOSAL FOR ESTABLISHMENT OF A
WILDLIFE BIOLOGIST TRAINEE POSITION
WITH THE CONFEDERATED SALISH & KOOTENAI TRIBES

The following proposal for establishing a wildlife biologist training position is submitted for your consideration as one method of contributing to the 1995 goal for Tribal member employment while assuring standards for professional positions are maintained.

Need for the Position - The Tribal Council on April 21, 1987 set a Tribal-wide goal to fill all employment positions with Tribal members by 1995. In June 1987 the Council recognized the need to undertake special initiatives to educate Tribal members for professional and technical positions in order to meet the 1995 employment goal and established a pilot education program. [redacted] the pilot trainee, signed a Contract for Future Employment and Repayment of Educational Loan and was hired as a Tribal Fisheries Technician while working toward obtaining a Bachelor of Science degree in Fisheries Biology. This proposal is patterned after the pilot education program for the Tribal Fisheries Biologist and is intended to contribute to the pool of professionally trained Tribal members eligible for employment by 1995.

Additionally, this proposal is aimed at developing managerial skills for the trainee. The Tribal Wildlife Program is in the process of initial establishment, as a result of contracting,

pursuant to P.L. 93-638, the Bureau of Indian Affairs' local agency program. The first task associated with establishing this program is the hiring of a Wildlife Biologist who can manage the program. Although the process of advertisement and selection of Wildlife Program Manager has not been completed, it is anticipated that only non-members and Indians from other Tribes will meet the educational and experience requirements for the position. For this reason, it is important to develop a process to assure that Tribal members meet not only the educational *and* experience requirements, but develop managerial skills in order to contribute to achievement of the 1995 employment goal in this program. The proposed trainee position is structured to develop those skills.

Organizational Structure - The proposed trainee position would be located in the Tribal Wildlife Program under the direct supervision of the Tribal Wildlife Program Manager. The trainee would be a Tribal employee and would be expected to perform, on a part-time or full-time basis, work at the levels appropriate to the education and experience levels enjoyed (technical or professional) while pursuing the required Master of Science Degree in Wildlife Biology, or a closely related field, or while completing in-service training provided by the Program Manager. The Tribal Wildlife Program Manager, if a non-member is hired to fill that position, would be required to sign an employment contract which included training of a Tribal member Wildlife Biologist (trainee) to perform, at the Journeyman level, all

functions, duties, and responsibilities of the Program Manager, as a specific responsibility.

Contractual Requirements - Both the non-member Wildlife Program Manager and Wildlife Biologist Trainee would be required to execute employment contracts as a part of this training program. An outline of the proposed terms and responsibilities of those contracts follow.

Employment Contract - Wildlife Program Manager

Term: Three years, renegotiable for additional three years, but not to exceed December 30, 1995

Duties: Develop, implement and manage Tribal Wildlife Program

Perform duties of established position as described in attached position description

Develop and implement, at Council's direction, biologically sound wildlife management recommendations and plans

Develop and present proposals for contracts, and modifications thereto, to conduct the Tribal Wildlife Program pursuant to P.L. 93-638

Give written and oral testimony and appear as requested for purposes associated with wildlife management, regulation and litigation

Train Tribal Trainee (Biologist) to perform, at journeyman level, all functions, duties, responsibilities of the Program Manager prior to assumption of those responsibilities on or before December 31, 1995

(May require continued contract on a consultant basis after December 30, 1995, depending on experience of trainee)

Termination of employement for good cause or Reduction in Force

Other Standard Employment Clauses included in similar employment contracts

Employment Contract- Tribal Trainee (Wildlife Biologist)

Term: Length of time necessary, based on individual qualifications, for trainee to acquire Master of Science Degree in Wildlife Biology or closely related field

Duties: Obtain Master of Science Degree in wildlife biology, wildlife management, zoology, or a closely related field by _____, or in any case prior to December 31, 1994

Upon completion of the course of study culminating in a MS, will accept employment as a wildlife biologist with the Tribes

Obtain Bachelor of Science Degree in wildlife biology, wildlife management, zoology, prior to _____, or in any case no later than December 31, 1992

- Termination of employment for good cause

Repay Tribal educational loan if terminated or suspended of own volition or involuntarily due to action of the appropriate educational institution

Educational loan debt repayment made by the Tribes in the amount of $5000 per year for each year of successful employment with the Tribes up to three years ($15,000)

Educational loan debt repayment extended to four years if GPA 3.50 or more ($20,000)

- Summer and/or part time employment with the Tribes at appropriate rate of pay, ie. technical and professional while pursuing required degrees

- Performance evaluated annually

- Termination for good cause or Reductions in Force

- 3.0 average per quarter

Tribal Trainee Advertisement and Selection Requirements and Criteria - In order to assure the best qualified Tribal member trainee is selected for the training position competitive

selection is mandatory. The following advertising requirements are recommended as mandatory.

-Tribal member

-High school graduate or GED equivalent

-Eligible for tribal education loan or educational loan from another lending institution and willing and able to make timely repayment

During the screening and selection processes preference would be given as follows:

40 points	- Bachelor's degree in wildlife biology or closely related field
10 points for each year standing	- College credit for coursework in wildlife biology or closely related field
5 points for each year up to three years	- Work experience in advertised field or closely related field
10 points	- GPA 3.0 or higher
5 points	- GPA in the range 2.5 - 2.9

As part of the application process, the applicant will expected to submit an essay on the following theme: My Desire to Become a Wildlife Biologist for the Confederated Salish and Kootenai Tribes. This essay will be used to determine intent and commitment on the applicant's part to complete the training program and also would be used to evaluate the applicant's written communication skills.

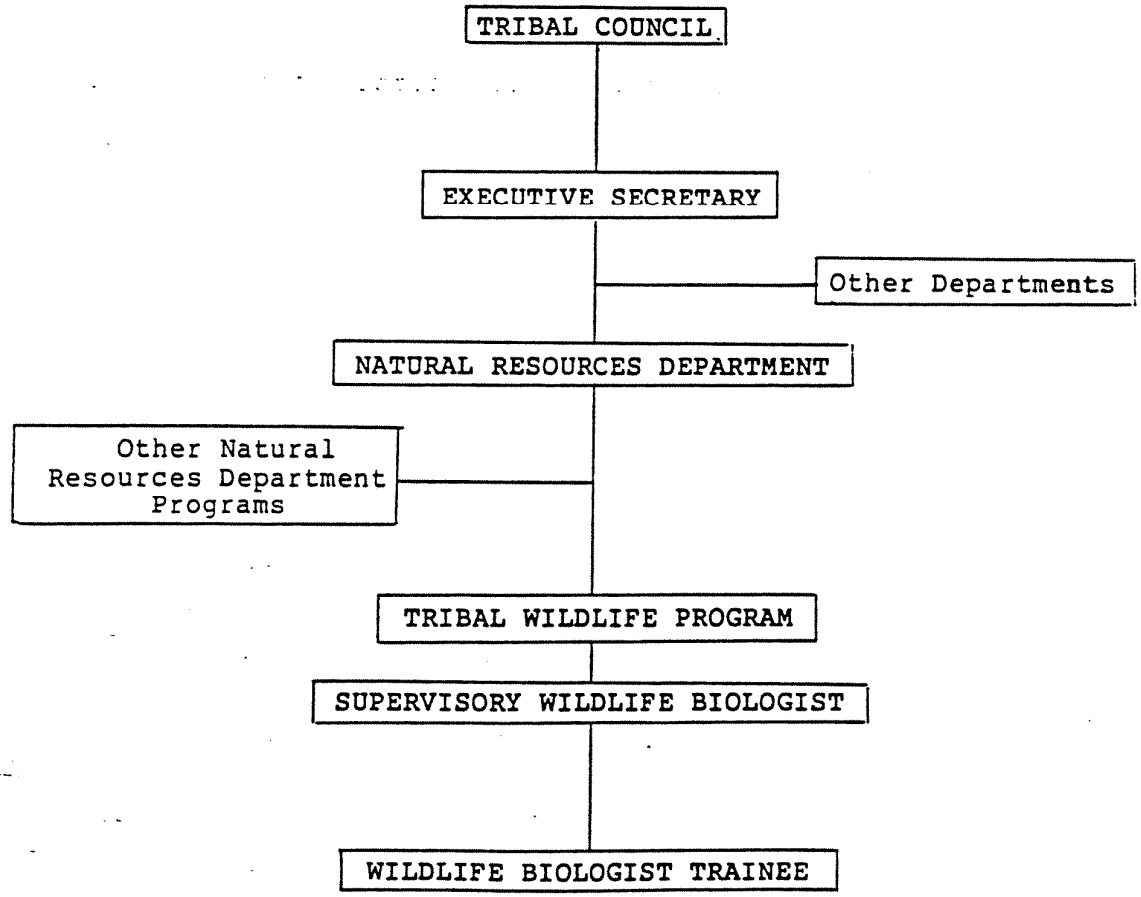
The Personnel Office will be responsible for screening all applicants to eliminate those not meeting the mandatory

requirements. A selection committee composed of the Natural Resources Department Head, an Educational Specialist, a Wildlife Biologist (Consultant, Employee or professional from an outside organization),and a representative from the Personnel Office, will interview and select the trainee and a first alternate from the top three to five qualified candidates. During the interview, consideration will be given for oral communication skills, written communication skills, commitment to program completion in the specified time frames, ability to maintain a GPA of 3.0 or above, and responses to predetermined questions.

One selected, the trainee must complete the contractual agreement and obtain financing for the first period of study within ninety days. If this cannot be accomplished, the training position will then be offered to the first alternate. In the event neither the trainee, nor the first alternate is able to complete the contract and obtain financing, the training position will be readvertised.

Conclusion - Immediate approval and implementation of this proposal will assure that a tribal member will meet the professional, experential and managerial requirements of the Tribal Wildlife Program Manager by 1995, or as shortly thereafter as the academic system allows.

ORGANIZATIONAL CHART



Incumbent:

POSITION DESCRIPTION
WILDLIFE TECHNICIAN
June, 1988

FACTOR 1 - GENERAL DESCRIPTION OF WORK

The Wildlife Technician is a permanent full-time technicial position under the supervision of the Tribal Wildlife Biologist. The incumbent is responsible for assisting in field investigations, laboratory analysis and summarization of groups of data as assigned. Examples of duties include:

--- Performs field operations as assigned by immediate supervisor;
--- Performs radio tracking assignments to locate animals by land search, vehicle or aircraft;
--- Performs population and habitat surveys as assigned;
--- Operates and maintains equipment such as vehicles, boats, outboard motors, traps, nets, radio tracking gear, etc;
--- Assists in trapping, banding, tagging, and radio collaring of animals;
--- Prepares field data forms;
--- Collects and assimilates field data for analysis;
--- Utilizes and intreprets topographical maps and aerial photos for field operations;
--- Measures areas and distances on maps using planimeters and dot grids;
--- Enters data into the computer;
--- Supervises seasonal aides as assigned;
--- Performs other duties as required or assigned.

FACTOR 2 - DIRECTION RECEIVED

The Wildlife Technician functions under the supervision provided by the Tribal Wildlife Biologist. The supervisor makes specific assignments. The technnician will work both with the Tribal Wildlife Biologist and independently to complete assignments.

FACTOR 3 - SUPERVISION EXERCISED

The Wildlife Technician exercises technical supervision of seasonal aides and trainees as assigned.

FACTOR 4 - WORKING RELATIONSHIPS

The incumbent routinely makes contact with the general public, Tribal employees and employees of other agencies and institutions.

FACTOR 5 - WORKING CONDITIONS

The Wildlife Technician functions in both office and field environments. In field environments the incumbent works with and in close proximity to mechanized equipment and machinery and is periodically exposed to hazardous weather conditions. The

incumbent may be required to work long hours, some holidays and weekends.

QUALIFICATION REQUIREMENTS

Training and Experience

A high school diploma is required, and some post-high school education in natural sciences is desired.

Knowledge

The incumbent must be able to use a calculator accurately and also be able to write complete and accurate notes.

Skills

The employee must be able to learn complicated scientific techniques and perform them accurately.

Necessary Special Requirements

The person must possess a Montana State driver's license and be eligible for a Federal driver's license.

BUDGET PROPOSAL FOR TRAINING PROGRAM

OPTION 1

-Trainee selected is a senior in Wildlife Biology
-A two year master program is anticpated
-A three year loan repayment is anticipated due to a GPA <3.5
-Three months per year or seasonal employment is anticipated

	FY89	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97
PERSONNEL	4530	5970	5970						
LOAN REPAY.				5000	5000	5000			

TOTAL BUDGET $31,470 OVER A FIVE YEAR PERIOD*

OPTION 2

-Trainee selected has no college
-A four year bachelor program is anticipated
-A two year master program is anticpated
-A three year loan repayment is anticipated due to a GPA <3.5
-Three months per year or seasonal employment is anticipated

	FY89	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97
PERSONNEL	4530	4530	4530	4530	5970	5970			
LOAN REPAY.							5000	5000	5000

TOTAL BUDGET $45,060 OVER A NINE YEAR PERIOD*

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*All estimates are based on 1989 dollars and do not project Cost of Living Adjustments or Merit Increases. All operating costs, such as vehicle rental and operation and maintenance will be absorbed by the Wildlife Program and would not be costs attributed to the training program.

EDUCATION AND EMPLOYMENT AGREEMENT

This contract is entered into this _____ day of _____, 1988 by and between [redacted], residing at _____, hereafter referred to as [redacted] and the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation, Box 278, Pablo, Montana 59855, a federally recognized Indian Tribe, hereafter called the "Tribes", by and through Michael T. Pablo, Chairman of the Tribal Council, and Joseph E. Dupuis, Executive Secretary, its authorized representatives.

RECITALS

1. The Tribes have established a policy of full Tribal employment by the year 1995; and

2. Enhancement of Tribal programs requires highly trained and educated professionals, and

3. The Tribes have established a program to assist qualified Tribal members in their efforts to obtain professional employment positions with the Tribes; and

4. [redacted] has qualified for Tribal assistance in accordance with the condition and covenants of this contract

5. Therefore, in consideration of the above premises and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties by mutual consent agree and covenant to abide by the terms of this contract.

I. PURPOSE

The purpose of this contract is to provide a qualified Tribal member, [redacted] with the opportunity to further his educational and professional goals while at the same time furthering the management and self-governing goals of the Tribes in the arena of the reservation wildlife resources.

II. TERM OF CONTRACT

The duration of this contract is divided into three distinct and separate terms. The terms shall not be deemed cumulative but shall be enforced in seriatim. Execution of this contract shall initiate and cause to be effective the first term. The second term shall not become effective unless and until [redacted] has completed all conditions of the initial term of the contract to the satisfaction of the Tribes. Likewise, the third term shall not become effective unless and until Swaney has completed all conditions of the second term of the contract.

(1) First Term The First Term of this contract shall commence upon the date of execution of this contract and shall end upon the date when [redacted] receives a Bachelor of Science degree in wildlife biology, wildlife management, or zoology from an accredited college or university with an under-graduate grade point average of at least 3.0 on a scale of 4.0 for each quarter or semester subsequent to the date of execution of this contract, or on December 31, 1992, whichever shall first occur.

(2) Second Term The Second Term of this contract shall commence upon the date when [redacted] receives a Bachelor of Science degree pursuant to the First Term but only if said degree is obtained on or before December 31, 1992 and in accordance with the requirements of the First Term. The Second Term shall end upon the date when [redacted] receives a Master of Science degree in wildlife biology, wildlife management, zoology (or a closely related field previously approved by the Tribes) from an accredited college or university, with a graduate grade point average of a least 3.0 on a 4.0 scale or upon December 31, 1994, whichever date shall first occur.

(3) Third Term The Third Term shall commence upon the date when [redacted] receives a Master of Science degree but only if such degree is obtained on or before December 31, 1994 and in accordance with the Second Term of this contract. The Third Term shall have a duration in accordance with either subsection (a) or (b) below:

(a) in the event that [redacted] receives the Masters degree pursuant to the terms of this contract with an overall average grade point for the Masters program at graduation of at least 3.0 on a scale of 4.0 the Third Term shall run for three full years from the date of its commencement; or

(b) in the event that [redacted] receives the Masters degree pursuant to the terms of this contract with an overall average grade point for the Masters program at graduation of at least 3.5 on

a scale of 4.0 the Third Term shall run for four full years from the date of its commencement.

III. OBLIGATIONS OF [redacted] DURING EACH TERM OF CONTRACT

(1) First Term [redacted] agrees that he shall maintain a college or university grade point average of at least 3.0 on a scale of 4.0 for each quarter or semester subsequent to execution of this contract and that if such grade point average is not maintained that he shall not be entitled to any benefits pursuant to this contract, and this contract may be terminated by the Tribes.

(2) Second Term [redacted] agrees that he shall obtain a Masters of Science degree in accordance with this Contract and shall have a cumulative Graduate degree grade point average of at least 3.0 on a scale of 4.0, and that if such grade point average is not obtained that he shall not be entitled to any benefits pursuant to this contract, and this contract may be terminated by the Tribes.

(3) Third Term [redacted] agrees that he shall accept, if offered by the Tribe, to commit and obligate himself to permanent full time employment as Tribal wildlife biologist for up to three years if the contract shall be in force pursuant to Section II, Subsection (3)(a), or for four years if the contract shall be in force pursuant to Section II Subsection 3(b). In either circumstance, continued employment and compliance with the contract conditions and covenants after [redacted] commits to permanent full time employment shall be

subject to all standard Tribal employment performance review evaluations, recommendations, and conclusions and continued employment shall be conditioned upon satisfactory employment performance.

IV. OBLIGATIONS OF TRIBES DURING EACH TERM OF CONTRACT

(1) First Term During the First Term of the contract the Tribes will make available to [redacted] during academic year summer breaks, summer or part-time employment opportunities at the level of "wildlife technician" or comparable position at standard rates of pay and benefits and subject to standard Tribal employment performance evaluations, recommendations and conclusions.

(2) Second Term Upon commencement of the Second Term of the contract, if any, the Tribes will make available to Swaney during academic year summer breaks, summer or part-time employment opportunity as an entry level wildlife biologist or comparable position at standard Tribal rates of pay and benefits and subject to standard employment performance evaluations, recommendations and conclusions.

(3) Third Term Upon commencement of the Third Term of this contract, if any, the Tribes will make available to [redacted] a permanent full time employment positions of Tribal wildlife biologist at standard Tribal rates of pay and employment benefits and subject to standard employment performance evaluations, recommendations and conclusions and to all Departmental and Tribal reorganization, if any. In addition to

the above, the Tribes will excuse and absolve [redacted] obligation to repay portions of his student loans obtained through the Tribal Credit Program of the Tribes pursuant to the following schedule.

(a) If [redacted] overall average graduate school grade point average falls within the range of 3.0 through 3.49 on a 4.0 point scale the Tribes will excuse Five Thousand dollars of Tribal credit student loans for each full year of satisfactory employment as a Tribal wildlife biologist for a maximum of three consecutive years and a total of Fifteen Thousand dollars.

(b) If [redacted] overall average graduate school grade point average is 3.50 or better on a 4.0 point scale the Tribes will excuse Five Thousand Dollars of Tribal Credit Program student loans for each full year of satisfactory employment as a Tribal wildlife biologist for a maximum of four consecutive years and a total of Twenty Thousand Dollars.

(c) In the event that [redacted] Third Term employment should terminate during the course of any year period his student loan will be excused in the proportionate amount of his employment within that year period.

V. FORUM

The parties agree that any dispute arising out of or resulting from this contract shall be determined in the court

of the Confederated Salish and Kootenai Tribes subject to the laws of the Confederated Salish and Kootenai Tribes.

VI. NO WAIVER OF DEFAULT

(1) The failure of the Tribes to seek redress for violation of, or to insist upon strict performance of any covenant or condition of this contract shall not prevent a subsequent act, which would have originally constituted a violation or default from having all the force and effect of an original violation of default. No provision of this contract shall be deemed to have been waived by the Tribes unless such waiver be in writing signed by the Tribes.

VII. MISCELLANEOUS

(1) This contract is binding upon the parties and shall not be amended or modified except by mutual consent in writing executed by both parties and appended to the contract.

(2) This contract is personal in nature and no benefit or obligation may be assigned, obligated or otherwise encumbered by either party.

In witness thereof the undersigned parties have signed this Agreement, under seal, on the date first written above.

[redacted]

MICHAEL T. PABLO
Tribal Council Chairman
Confederated Salish and
Kootenai Tribes

JOSEPH E. DUPUIS
Executive Secretary
Confederated Salish and
Kootenai Tribes

CLARA M. CHARLO
Tribal Credit Program
Confederated Salish and
Kootenai Tribes