

Evaluation of the Tribal General Assistance Program



Promoting Environmental Results



Through Evaluation

Acknowledgements

This evaluation was performed by Industrial Economics, Incorporated (IEc) for EPA's Office of Environmental Policy Innovation under Contract EP-W-04-023 between EPA and IEc. The IEc evaluation team included Tracy Dyke-Redmond and Heather Posner and Allison Barasz. Rodges Ankrah, Teresa Kuklinski and Candi Schadel of EPA's Office of Water, American Indian Environmental Office and Yvonne M. Watson of EPA's Office of Environmental Policy Innovation as the technical advisor.

This report was developed under the Program Evaluation Competition, co-sponsored by EPA's Office of Policy, Economics and Innovation and the Office of the Chief Financial Officer. To access copies of this or other EPA program evaluations, please go to EPA's Evaluation Support Division's website at <http://www.epa.gov/evaluate>.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
CHAPTER 1: INTRODUCTION.....	1-1
I. Overview of The Tribal General Assistance Program.....	1-1
II. Purpose/Objectives of The Evaluation.....	1-5
III. Evaluation Questions	1-6
IV. Structure of The Report	1-8
CHAPTER 2: GAP EVALUATION METHODOLOGY	2-1
I. Evaluation Design.....	2-1
II. Steps for Conducting the Evaluation.....	2-2
III. Quality Assurance Procedures	2-18
IV. Strengths and Weaknesses of The Evaluation Design.....	2-18
CHAPTER 3: GAP EVALUATION FINDINGS.....	3-1
I. Federally Recognized Tribes' Access to GAP.....	3-2
II. Tribal Utilization of Resources Provided by GAP.....	3-3
III. Indicators of Tribal Environmental Capacity	3-12
IV. GAP Process Outputs to Achieve Tribal Goals and Priorities	3-26
V. GAP Support for EPA's Strategic Goal of Increasing Tribes' Ability to Build Environmental Program Capacity	3-28
CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS.....	4-1
Appendix A: GAP Evaluation Questions	
Appendix B: Interview Guide for Regional GAP Project Officers	
Appendix C: Discussion Guide for Tribes	
Appendix D: List of Tribes in Evaluation Sample	
Appendix E: GPRA Codes and Activity Categories	
Appendix F: Tribal Population Statistics	
Appendix G: Activity Comparison Across Tribe Sample Groups	
Appendix H: Regional GAP Project Officers Interviewed	
Appendix I: Tribes Participating in Panel Discussions	
Appendix J: Sources of Non-GAP Funding and Program Support	

EXECUTIVE SUMMARY

Introduction

The EPA is responsible for administering Federal environmental statutes on all U.S. lands, including Indian country. The EPA recognizes tribal governments as the primary parties for making environmental policy decisions and implementing environmental programs that affect Indian communities. GAP was established under the authority of the Indian Environmental General Assistance Program Act of 1992. The primary purpose of GAP is to help federally recognized tribes and intertribal consortia build the basic components of a tribal environmental program, which may include planning, developing, and establishing the administrative, technical, legal, enforcement, communication, and outreach infrastructure.

In 2004, EPA's American Indian Environmental Office, which manages GAP, applied for funding assistance from EPA's Office of Policy, Economics, and Innovation for a program evaluation to determine how effective GAP has been in building Tribal environmental capacity. For the purpose of this evaluation, Tribal environmental capacity is defined as administrative, legal, technical and enforcement capability of Tribes to develop and implement a Tribal environmental program, and communications capability to work with Federal, State, Local, Tribal, and other environmental officials. This evaluation is the result of that request and is designed to answer the following five groups of questions:

- 1) Is the GAP being accessed by all federally-recognized tribes? If not, why are some tribes not involved in GAP? Are there tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?
- 2) Are tribal governments using the resources (technical, fiscal, and programmatic) provided as a component of GAP?
 - a) How often are they accessed?
 - b) How are tribes using these resources?
 - c) To what extent have tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?
 - d) How does participation in GAP increase understanding of the process required to develop a tribal environmental program?
- 3) What indicators of tribal environmental capacity exist?
 - a) To what extent have tribes achieved environmental capacity as suggested by the presence of these indicators?
 - b) What factors contribute to the achievement of environmental capacity, and what is the impact of these factors?
 - c) What is the relative contribution of GAP toward achieving capacity?
- 4) Is the GAP process providing adequate outputs to achieve tribal goals and priorities?

- 5) To what degree does GAP support EPA's strategic goal of increasing tribes' ability to build environmental program capacity?

Methodology

To address these questions, the evaluation drew on several sources of information, including existing databases file reviews for a sample of 111 tribes in the nine EPA regions with federally recognized tribes. Databases reviewed included:

1. GAP Accountability Tracking System, which contains records from a sample of GAP recipients who had received GAP funding prior to 2003 and provides documentation of their programming efforts under GAP;
2. Grants Information and Control System, which contains records of all EPA grants, including all GAP grants;
3. Audit Database, which contains information on audits of government grants to tribes and states, including audit findings and dates for EPA grants awarded to tribes; and
4. Strategic Goals Reporting System, which contains records on how GAP grants support EPA's Strategic Goal 5, Objective 5.3, which is to build tribal environmental capacity.

The database reviews were supplemented with reviews of regional files containing grant documents (e.g., quarterly reports provided by tribes funded under GAP) in order to ensure adequate representation of tribal grants reviewed across EPA regions. Note that GAP database and file review data represents GAP grantee activity from October 2000 – September 2004, and is therefore somewhat out of date.

In addition to database and file reviews, the evaluation was based on discussions with key stakeholders, including panel discussions with tribal representatives at three regional tribal meetings and interviews with GAP project officers in eight regions. These discussions provided a more recent perspective on the extent to which GAP is supporting development of tribal environmental capacity.

The draft evaluation methodology was peer reviewed by EPA, tribal representatives, and academic evaluation experts. The draft methodology was modified to address comments from the peer reviewers, including changes such as:

- Inviting greater tribal input during the interviews of Tribal representatives;
- Asking tribal representatives about their definition of environmental capacity; and
- Assessing the extent to which organizations other than EPA, as well as program areas within EPA other than GAP, have helped Tribes develop environmental capacity.

Findings

Federally Recognized Tribes' Access to GAP:

During 1994-2004, 89 percent the 561 federally recognized tribal governments in the United States received at least one GAP grant. The tribes that did not receive GAP grants had various reasons for not accessing this funding, such as:

- A policy of not accepting federal grant money
- Very small tribes without basic infrastructure to apply
- Non-reporting or fiscal mismanagement made some tribes ineligible
- In one instance, lack of regional staff to process applications.
- Lack of GAP funding hindered the development of these tribes' environmental programs (except for tribes with significant financial resources of their own).

Tribes' Use of GAP Resources

Between 1994 and 2004, the 111 tribes in the sample received an average of seven GAP grants; on average the value of each grant was \$102,472. A majority (76 percent) of tribes in the sample accessed technical resources, such as workshops or training. GAP facilitates contact and networking with regional tribal staff, other tribes, EPA media program offices, and non-EPA agencies and organizations. A minority (23 percent) of tribes in the sample accessed programmatic resources, defined as GAP-specific grants management or fiscal administrative training.

How Tribes Are Using GAP Resources

Tribes use GAP funds and technical and programmatic resources primarily to establish and maintain a tribal environmental presence in Indian country, which many tribes define as having a qualified staff person available on the reservation to respond to environmental issues of concern to their tribal council and members. In addition, tribes use GAP resources to participate in a variety of activities that help build their environmental capacity and expand their environmental presence. We examined the types of activities conducted by the 96 tribes in our sample for which we were able to obtain activity data from the either the GAP database or file reviews. Nearly all tribes (98 percent) participated in activities related to the general management and administration of their environmental programs. A majority of tribes also participated in land activities (84 percent), water activities (73 percent), and grant writing activities (65 percent). A smaller proportion of tribes conducted air activities and special emphasis activities.

A further analysis of tribal activities funded by GAP by activity type shows that more than 80 percent of tribes in the sample participated in program development or establishment, staffing, and communication activities. Approximately two-thirds of

tribes engaged in baseline assessment and grant writing activities. Considerably fewer tribes conducted activities associated with media-specific programs, such as the development of Quality Assurance Project Plans and monitoring capacity; the development of legal tools such as codes, ordinances, standards, and permitting authority; and the administration of grants received in support of these programs. Only two tribes participated in database development activities.

How Tribes Are Meeting EPA Expectations

The award of GAP grants brings with it EPA's expectation that tribes will fulfill the requirements of GAP for demonstrating accountability in the utilization of funds as well as for grants management and performance reporting, detailed in the 2000 GAP Guidelines. Based on our interviews with regional POs, we found that, overall, tribes are meeting regional expectations for grants management, the execution of administrative functions, and carrying out proposed activities. Tribes continue to improve the timeliness, quality, and completeness of their GAP work plans and progress reports. Currently, most tribes in a majority of regions are submitting their work plans and progress reports on time.

We also examined the results of A-133 audits conducted for the 111 tribes in the sample to assess tribes' ability to execute administrative functions. Approximately 25 percent of the 111 tribes in our sample had been audited during the period 1997-2004. Of these 27 tribes, the audits for 24 resulted in at least one reportable condition, material weakness, or material noncompliance outcome. Audit findings mainly cited problems with tribes' ability to correctly track and document expenditures. Note that because participation in an A-133 audit is required only when a tribe's total annual expenditures of federal funds exceed a high threshold, most of the tribes in the sample would not likely have to undergo such an audit. As a result, the tribes in the sample that were audited and cited with a reportable condition, material weakness, or a material non-compliance may not be representative of the ability of the tribes not audited to execute administrative functions pertaining to GAP grants. It may also be the case that since A-133 audits include a review of all federal expenditures for a tribe, the findings recorded in the Audit Database for tribes in our sample may not be related to tribal fiscal performance under GAP. Regional Project Officers for GAP identified only a few tribes that had received a major finding on an A133 audit.

Influence of GAP on Tribes' Understanding of Environmental Program Development

In addition to assessing the direct resource outputs provided by GAP, the evaluation seeks to discern how tribal participation in GAP and utilization of GAP resources has influenced, 1) tribes' understanding of the process required to develop an environmental program, and, 2) the way tribes approach the various administrative and programmatic functions associated with the development process. Tribal representatives emphasize that instead of changing tribal understanding of how to develop an environmental program, GAP facilitates tribes' ability to develop a program that is responsive to each tribe's unique environmental conditions and priorities. GAP resources enable tribes to establish an environmental presence, which in turn provides the foundation upon which each tribe

can build an environmental program tailored to meet its needs. From EPA’s perspective, however, GAP may influence and clarify tribal priorities as tribal environmental staff acquire training, learn about specific environmental conditions on tribal lands, and become more aware of concrete program opportunities through their interactions with EPA regional tribal and media program contacts.

Indicators of Tribal Environmental Capacity

Many tribal representatives offered definitions of capacity and indicators that fall within the GAP category of technical capability, such as: hiring and training of qualified environmental professionals and expansion of tribal environmental programming efforts to include media-specific components. A few tribes linked environmental capacity with legal or enforcement capacity.

Regional project officers identified many of the same key indicators of capacity as tribes, such as tribes’ ability to establish an environmental presence; retain qualified, knowledgeable staff over the long-term; and diversify their environmental programming.

Achievement of Tribal Environmental Capacity

In order to determine the extent to which tribes in the sample have achieved environmental capacity as defined by GAP, we examined tribal capability in each of the five indicator areas - technical, legal, enforcement, administrative, and communication. We identified a set of coded activity types for each indicator and equated tribal capability in that area with a tribe’s participation in one or more related activity. Exhibit ES-1 lists the activity types selected to demonstrate tribal capability for each indicator and the proportion of the 96 tribes that participated in activities within each type during 2000-2004.

Exhibit ES-1: Tribal Achievement of Environmental Capacity, 2000-2004 (n = 96)			
Type of Tribal Capacity	Indicator of Environmental Capacity	Number of Tribes	Percent of Tribes
Legal	Developed a Code, Ordinance, or Standard	25	26%
	Participated in an Activity to Increase Legal Capacity	24	25%
	Adopted a Code, Ordinance, or Standard	7	7%
Enforcement	Participated in an Activity to Increase Enforcement Capacity	25	26%
Technical	Hired a Professional Employee	86	90%
	Participated in Water Activities	70	73%
	Participated in Waste Activities	70	73%
	Participated in Air Activities	47	49%
Administrative	Participated in an Activity to Increase Fiscal Administration Capacity	15	16%
Communications	Participated in Internal Communication Activities	68	71%
	Participated in External Communication Activities	66	69%
	Participated in General Communication Activities	28	29%

Factors that Contribute to the Achievement of Environmental Capacity

In addition to requesting tribal and regional input on the most important indicators of tribal environmental capacity, we asked tribes and POs to identify factors that impact environmental capacity and describe how they influence tribal efforts. As ranked by project officers, the following factors almost always or often influence environmental capacity:

- Tribal council support for environmental programs
- Qualifications of tribal environmental director and/or staff
- Turnover rate of tribal environmental director and/or staff
- Clear tribal environmental priorities
- Degree of information sharing among tribes
- Access to funding outside of GAP.

Factors tribal representatives consider most influential include:

- Stability of knowledgeable tribal environmental staff
- Effective communication between tribes and EPA regions (and between the EPA regional tribal offices and media programs)
- Support of tribal council for planning and funding environmental programs relative to other tribal priorities.

Relative Contribution of GAP Toward Achieving Environmental Capacity

There are many factors that can potentially affect tribes' achievement of environmental capacity such as GAP funding and technical assistance, the stability of tribal leadership and staffing, and the degree to which Tribal council members focus on environmental concerns. Another potential factor is tribal access to other sources of funding (e.g., EPA media programs, other federal and state agencies, and tribes themselves).

Interviews with tribal representatives and POs make clear that they perceive GAP funding as essential to achieving environmental capacity. Many tribes say that without GAP funding, they would be able to do very little environmental work. They stress that GAP is the foundation for their environmental programs, and GAP resources enable them to establish a basic program infrastructure, through which they can apply for other types of environmental funding. This view supports a basic premise of the GAP program, namely, that as GAP helps tribes build their environmental capacity, tribes will be able to access other sources of funding to support their environmental programs.

A comparison of tribes that first accessed GAP early in the program's existence (1994 – 1999) to those that first accessed GAP in later years (2000 - 2004), shows that tribes that accessed GAP earlier have acquired a greater proportion of non-GAP EPA funding relative to GAP funding. This supports the view that GAP is helping tribes expand their sources of environmental funding, which suggests that tribes have increased their environmental capacity accordingly. However, tribes that accessed GAP earlier have not achieved a greater number of indicators of environmental capacity with GAP funds

compared to tribes that adopted GAP later. The results of this analysis run counter to the hypothesis that tribes that have had GAP funding for a longer period of time would be further along in the process of developing environmental capacity, compared to tribes that had received GAP funding for a shorter period of time.

Sufficiency of GAP Outputs to Achieve Tribal Goals

Many of the tribal representatives interviewed stated that a key goal for tribes is having an environmental presence on tribal land, i.e., a qualified staff person who can coordinate the tribe's environmental programs, maintain a cohesive program, and be a point of contact for members of the tribal community and neighboring communities. GAP enables tribes to establish this environmental presence by providing the funds to hire, train, and retain professional and technical environmental staff. Tribes emphasize that GAP provides a foundation for tribal environmental programs.

While tribal representatives state that GAP funding is vital for establishing and maintaining an environmental presence, many perceive current levels of GAP funding as insufficient. When asked about additional resources tribes need to develop their environmental programs, several tribes indicate that above all else, they need sustained, consistent funding over time to enable them to hire and retain sufficient qualified staff, and thereby retain institutional knowledge. GAP provides an important source of sustained funding, although some tribes note that the requirement to re-apply for GAP funding every year takes away from the stability of the GAP program and the staff that GAP supports.

Tribes sometimes have goals and priorities that GAP does not address, either because GAP funding is insufficient to meet these goals, or because these goals involve implementation of environmental programs. Most tribes interviewed say that in order to meet tribal goals, they need to be able to use GAP funding for program implementation and maintenance, and they need additional funding to support this additional effort. In addition, while most tribes perceive overall consistency between GAP goals and tribal priorities, they also pointed out that it is difficult to mesh the cultural and traditional values of the tribes with the bureaucratic and regulatory guidelines and definitions established by GAP.

GAP Support of EPA's Strategic Goals

EPA's 2003 – 2008 Strategic Plan includes Objective 5.3, the percent of tribes that "had access to an environmental presence." This indicator increased from 36 percent in 1996 to an estimated 90.4 percent in FY 2006, with a peak of 97 percent in FY 2004. Access to an environmental presence is defined as the annual dollar value of GAP funding that AIEO determines is needed to establish an environmental presence.

EPA's updated 2006 - 2011 Strategic Plan includes new targets for building program capacity, including: increasing the percent of tribes conducting EPA-approved

environmental monitoring and assessment activities and increasing the percent of tribes with an environmental program. Further data is needed to conclusively assess progress toward these new targets.

Conclusions

Based on the findings from this evaluation, the evaluators conclude that:

- The extent of capacity-building varies across indicator areas for tribes in the sample that received GAP grants. These tribes have relatively well-developed technical and communications capabilities, but less developed legal, enforcement, and administrative capacity.
- GAP has done much in recent years to clarify grant expectations and administrative requirements for tribes, and tribes in turn are increasingly meeting these expectations and requirements.
- Tribes report that restrictions on GAP grants that preclude using GAP funds for program implementation are now hindering tribal environmental program development.
- Tribes emphasize that GAP funding is essential to achieving their environmental goals, but perceive that current levels of funding are insufficient to address tribal priorities.

Recommendations

The evaluation team makes the following recommendations for EPA based on the findings and conclusions from the evaluation:

Consider developing a mechanism to support tribal program implementation.

- EPA HQ and Regions could continue to promote and expand the use of Performance Partnership Grants (PPGs) by tribes.
- AIEO could eventually establish a second tier of GAP funding - "GAP plus" – to fund program implementation for those Tribes that show they have met key indicators of capacity under GAP.
- Another approach could be to establish a block grant for tribes similar to those established for U.S. territories.

Consider working more directly with tribes and regions to enhance administrative, legal, and enforcement capacity.

- To help build administrative capacity, AIEO could coordinate with regions to ensure that programmatic resources provided keep pace with tribal needs.
- EPA regions could offer legal support to help tribes enact their own codes, ordinances, and standards.

- In cases where tribes feel that they cannot or do not wish to implement their own environmental laws and regulations, AIEO should consider developing a coherent plan for working with tribes to protect the environment, while respecting tribal sovereignty.

Raise awareness of innovative environmental policy approaches that complement traditional codes and standards.

- Tribes may benefit from a greater emphasis on pollution prevention education, self-certification, and compliance assistance inspections.
- Tribes could leverage the considerable experience of EPA and states in developing innovative policy tools and approaches, as well as specific outreach materials.
- AIEO and regions could help tribes by raising awareness of innovative policy approaches, readily available materials, and potential funding sources.

Acknowledge cross-cultural differences, and continue working with tribes to maintain a respectful dialog.

- A key difference in perspective is that Tribes see GAP funding as an extension of EPA's trust responsibility.
- EPA views tribes as grantees that must meet certain requirements to show that they are accountable for funds.
- To foster greater understanding, Tribes suggest hiring more Native Americans to serve as regional POs and tribal coordinators.
- More frequent site visits to tribes by AIEO and EPA regional program staff could help underscore the diversity of tribal perspective, priorities, and approaches to environmental protection.

Track progress toward achievement of the new 2006-2011 strategic goals and targets.

- AIEO needs to ensure that its data collection systems allow for the effective capture and tracking of indicators related to the updated strategic targets.
- AIEO should consider the degree to which its proposed performance measures align with tribal priorities and perspectives, and the feasibility of tribes' of achieving them.
- The five-year cycle for setting strategic goals and targets may be too short to effectively track and measure tribal progress. AIEO should consider keeping consistent goals for a longer period of time.

CHAPTER 1: INTRODUCTION

This report summarizes the evaluation of the tribal General Assistance Program (GAP) conducted between 2005 and 2007 by Industrial Economics, Inc (IEc). The first section in this chapter begins with an introduction and overview of the tribal GAP, including a logic model that describes the program's design. The next section describes the purpose and objectives of the evaluation, and provides a review of the specific questions the evaluation is designed to answer and the relationship between the evaluation questions and elements of the logic model. The chapter concludes with a description of the structure of the evaluation report.

I. OVERVIEW OF THE TRIBAL GENERAL ASSISTANCE PROGRAM

The EPA is responsible for administering Federal environmental statutes on all U.S. lands, including Indian country. The EPA recognizes tribal governments as the primary parties for making environmental policy decisions and implementing environmental programs that affect Indian communities. GAP was established under the authority of the Indian Environmental General Assistance Program Act of 1992. The primary purpose of the GAP is to help federally recognized tribes and intertribal consortia build the basic components of a tribal environmental program, which may include planning, developing, and establishing the administrative, technical, legal, enforcement, communication, and outreach infrastructure. Total GAP funding has increased from initiation of the program, starting at a total of \$5.4 million in 1992 to \$60.4 million in 2005, although funding for 2006 was projected to decline slightly to \$56.9 million.¹ As shown in Exhibit 1-1, average funding per tribe has ranged from a low of \$26,738 in 1996 to a high of \$106,623 in 2004. Note that in recent years (2005 and 2006), the average amount of funding per tribe has declined. Note also that not all eligible tribes receive GAP funding, and funding is not distributed evenly between tribes, so these figures provide only a general idea of the level funding available to tribes over time. Chapter 3 provides further details about the amount of funding provided to GAP grantees.

¹ Data is drawn from the Goal 5, Objective 5.3 Reporting System, available online at https://iasint.rtpnc.epa.gov/TATS/tats_prv/tats_security.login_form?p_mode=reports, under Target 1 Program Performance Report. Last accessed April 2007.

Exhibit 1-1: History of GAP Funding*				
Year	Total GAP Funding	Number of Federally Recognized Tribes	Average Amount of Funding per Tribe	Percent Increase (Decrease) from Prior Year in Average Amount of Funding Per Tribe
1996	\$15,000,000	561	\$26,738	--
1997	\$28,000,000	562	\$49,822	86%
1998	\$38,500,000	565	\$68,142	37%
1999	\$42,000,000	565	\$74,336	9%
2000	\$42,000,000	567	\$74,074	0%
2001	\$52,000,000	572	\$90,909	23%
2002	\$52,000,000	570	\$91,228	0%
2003	\$56,150,000	572	\$98,164	8%
2004	\$60,991,000	572	\$106,628	9%
2005	\$60,404,000	572	\$105,601	(1%)
2006	\$56,900,000	572	\$99,476	(6%)

*Data on number of eligible entities, and therefore amount of funding per tribe, is not available for 1992 to 1995.

The GAP provides annual grant funding to federally recognized tribes and intertribal consortia through a negotiated process administered by each EPA region. The grant funds may be used by tribes to plan and carry out any number of capacity-building activities including the development of administrative procedures; quality assurance/quality control systems; sampling and laboratory capabilities; baseline environmental assessments; enforcement programs; legal procedures; communications plans; computer information systems; and staff qualifications and expertise. GAP may not be used for the ongoing implementation of media-specific environmental programs once established, with the exception of solid waste program implementation activities. Since GAP funds may generally not be used for implementation activities, the GAP program defines its outcomes as changes in knowledge and behavior (i.e., short-term and intermediate outcomes, as described below).

To illustrate the various components of the GAP, EPA and IEc developed a logic model (i.e., a graphical representation of the relationships between program inputs, outputs, and intended outcomes), presented in Exhibit 1-2. Key components include the following:

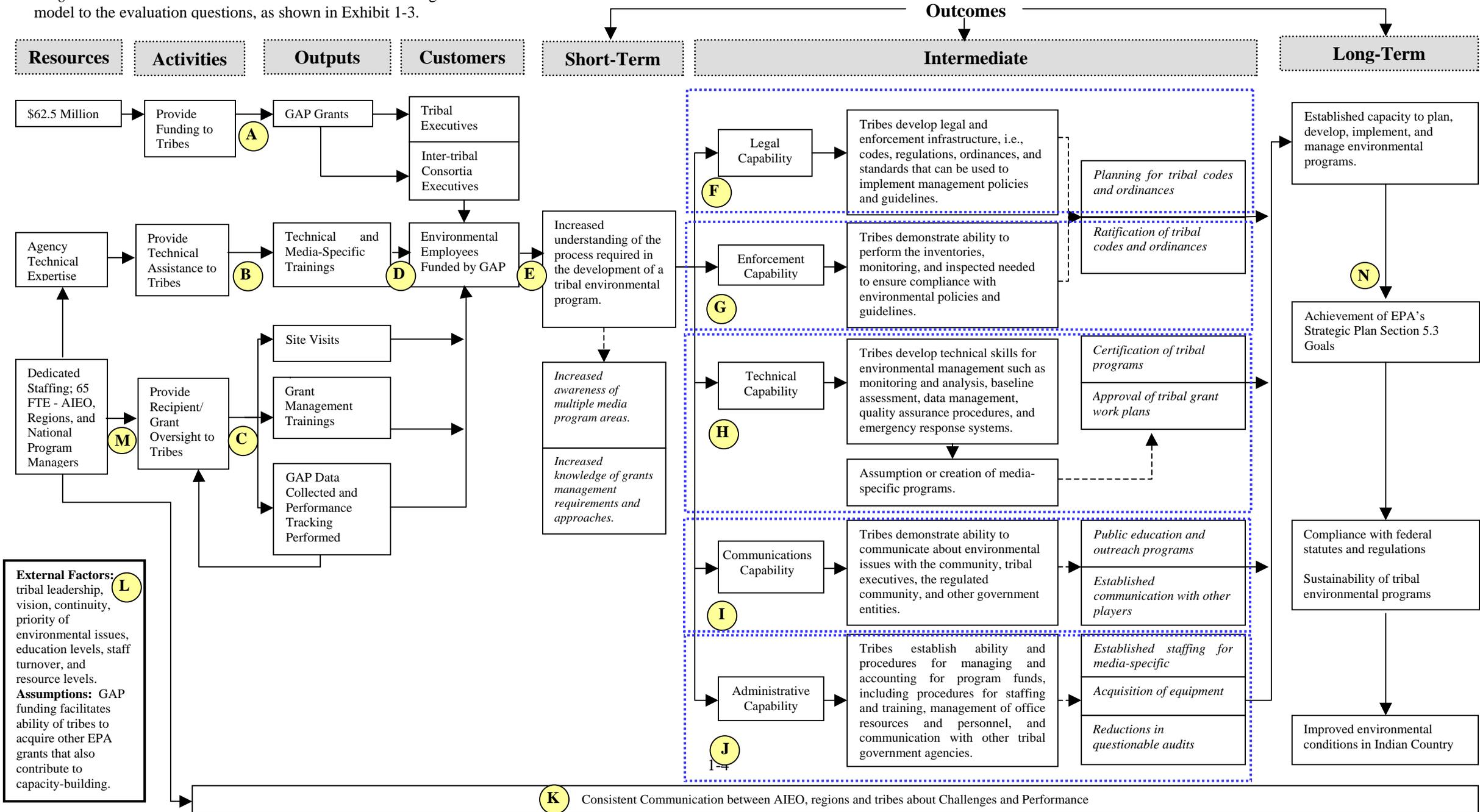
- **Resources** are the basic inputs of funds, staffing, and knowledge dedicated to the program.
- **Activities/Outputs** are the specific actions taken to achieve program goals and the immediate products that result. Under the GAP, these products include grant funds, technical assistance, training, and grant oversight.
- **Customers** are the users of the activities and outputs (fiscal, technical, administrative) provided. They are the tribal governments that receive GAP grants and the environmental employees hired with GAP funds.

- **Short-Term Outcomes** are changes in awareness, attitudes, understanding, knowledge, and skills resulting from program outputs. Technical and grant management training opportunities provided to tribal environmental employees through the GAP increase understanding of the processes required in developing a tribal environmental program. Note that outcomes listed in italics are intended as illustrative examples of the intended effects of tribes' increased understanding for how to develop a tribal environmental program.
- **Intermediate Outcomes** involve changes in behavior that are broader in scope than short-term outcomes. Intermediate outcomes often build upon the progress achieved in the short-term. Under the GAP, changes in tribal awareness, understanding, and skill level pave the way for planning, development, and initiation of capacity-building activities. The logic model includes examples of activities that represent increased capability in the legal, enforcement, technical, communications, and administrative arenas. Note that outcomes listed in italics are intended as illustrative examples of the effects of tribes' increased legal, enforcement, technical, communications, and administrative capability.
- **Long-Term Outcomes** parallel the overarching goals of the program and are the environmental improvements and public health benefits that flow from the behavioral, procedural, and operational changes.
- **Contextual/External Variables** are factors, not directly controlled by the program or its entities, which may affect program performance. For example, changes in tribal policy and budgetary priorities may influence the ability of tribes to sustain environmental efforts.

Elements of the logic model, noted by the circled letter codes, are referenced in section III in the discussion of the evaluation questions.

Exhibit 1-2. GAP Grant Program Evaluation Logic Model

Legend: Letter codes are used to connect elements of the logic model to the evaluation questions, as shown in Exhibit 1-3.



II. PURPOSE/OBJECTIVES OF THE EVALUATION

Since the passage of the Government Performance and Results Act of 1993, federal agencies are expected to regularly conduct evaluations of their programs as part of a larger effort to promote results-oriented government.² EPA's 2003-2008 Strategic Plan reflects a "sharpened focus on achieving measurable results" and notes that program evaluations are used, "to identify areas needing improvement, more effective strategies for achieving established goals, and ways to improve data collection or better measure program results."³ One area where EPA is seeking to measure its results is in its tribal program.

In 2004, EPA's American Indian Environmental Office (AIEO), which manages GAP, applied for funding assistance from EPA's Office of Policy, Economics, and Innovation (OPEI) for a program evaluation to be conducted by an independent evaluator. This evaluation is the result of that request. AIEO's goal in seeking this evaluation support was to, "...determine how effective GAP has been in building tribal environmental capacity with those tribes receiving funds[,]...to see if we are reaching the tribes to change their knowledge and behavior, and to determine how permanent those changes are."⁴ The 2000 GAP guidelines establish elements of a core tribal environmental protection program. These include "establish[ing] the administrative, legal, technical and enforcement capability of tribes to develop and implement a tribal environmental program...[and] [e]stablishing a Tribal communications capability to work with Federal, State, Local, Tribal, and other environmental officials."⁵ Having capability in each of these areas constitutes having environmental capacity for the purpose of this evaluation.

AIEO is also considering whether to expand the GAP beyond its current mandate of building tribal environmental capacity. Before proceeding with an expansion of the GAP, AIEO has decided to evaluate the existing program with regard to its impact on tribal capacity development and its relevance to tribal needs and to Section 5.3 of EPA's 2003-2008 Strategic Plan.

Industrial Economics, Inc. (IEc) was selected to assess the impact of the GAP on tribal environmental capacity and help AIEO understand which elements of GAP contribute to the establishment of multi-media environmental programs. The results of this evaluation are intended to help the tribal program demonstrate its successes to stakeholders and identify opportunities for improvement. The evaluation results are expected to be of particular interest to GAP stakeholders involved in awarding grants, providing technical assistance and oversight, and planning and executing tribal environmental programs. Participation by tribal environmental

² National Research Council, *Decision Making for the Environment: Social and Behavioral Science Research Priorities*, Washington, D.C.: National Academies Press, 2005.

³ U.S. Environmental Protection Agency (EPA), *2003-2008 EPA Strategic Plan: Direction for the Future*. Washington, D.C., EPA, 2005.

⁴ American Indian Environmental Office (AIEO), *Improving Results: Program Evaluation Competition Application*, Unpublished document provided by AIEO, 2004.

⁵ U.S. Governmental Protection Agency (EPA), *Indian Environmental General Assistance Program: Guidelines on the Award and Management of General Assistance Agreements for Indian Tribes*. Washington, D.C., EPA, 2000.

staff in the evaluation process is intended help build EPA's awareness of tribal priorities and progress toward achieving environmental goals. The results are expected help AIEO and Regional GAP project officers more effectively target outreach to tribes and identify the level of resources (administrative, financial, and technical) necessary to promote and sustain tribal environmental initiatives. Tribal environmental managers may find the evaluation results useful in influencing community decision-makers and further raising the profile of environmental protection programs among tribal members. More broadly, the evaluation results will be of interest to policy planners at EPA Headquarters tracking progress on the objectives EPA's strategic plan.⁶

III. EVALUATION QUESTIONS

The evaluation is designed to answer the following five groups of questions:

- 1) *Is the GAP being accessed by all federally-recognized tribes? If not, why are some tribes not involved in GAP? Are there tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?*
- 2) *Are tribal governments using the resources (technical, fiscal, and programmatic) provided as a component of GAP?*
 - a) How often are they accessed?
 - b) How are tribes using these resources?
 - c) To what extent have tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?
 - d) How does participation in GAP increase understanding of the process required to develop a tribal environmental program?
- 3) *What indicators of tribal environmental capacity exist?*⁷
 - a) To what extent have tribes achieved environmental capacity as suggested by the presence of these indicators?
 - b) What factors contribute to the achievement of environmental capacity, and what is the impact of these factors?
 - c) What is the relative contribution of GAP toward achieving capacity?
- 4) *Is the GAP process providing adequate outputs to achieve tribal goals and priorities?*
- 5) *To what degree does GAP support EPA's strategic goal of increasing tribes' ability to build environmental program capacity?*

⁶ This evaluation was specifically designed to assess progress on Section 5.3 of EPA's 2003–2008 strategic plan. After this evaluation was designed, EPA issued an updated 2008-2011 Strategic Plan, with updated goals and targets for AIEO. While the evaluation was not specifically designed to address progress toward these updated goals and targets, Chapter 3 does describe findings from this evaluation in relation to the 2008-2011 Strategic Plan.

⁷ The order of the three sub-questions listed for this evaluation question has been changed in Chapter 3 to facilitate the presentation of the evaluation findings.

Exhibit 1-3 lists the final evaluation questions and the components of the logic model to which they correspond.

Exhibit 1-3: Relationship Between Evaluation Questions and Logic Model	
Evaluation Question	Component of the Logic Model
1a. Is GAP being accessed by all federally recognized tribes?	(A)
1b. Why are some tribes not involved in GAP?	(A)
1c. Are there tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?	(A)
2a. Are tribal governments using the resources (technical, fiscal, and programmatic) provided as a component of GAP? How often are GAP resources accessed?	(A) (B) (C)
2b. How are tribes using GAP resources?	(D) (F) (G) (H) (I) (J)
2c. To what extent have tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?	(J)
2d. How does participation in GAP increase understanding of how to develop a tribal environmental program?	(E)
3a. What indicators of tribal environmental capacity exist?	(F) (G) (H) (I) (J) (K)
3b. To what extent have tribes achieved environmental capacity as suggested by the presence of these indicators?	
3c. What factors contribute to the achievement of environmental capacity, and what is the impact of each factor?	
<i>Tribal Priorities</i>	(L)
<i>Tribal Staffing</i>	(D)
<i>Tribal Funding</i>	(A) (L)
<i>Communication</i>	(K)
<i>Regional Activities</i>	(M)
3d. What is the relative contribution of GAP toward achieving capacity?	<i>Overarching question</i>
4. Is the GAP providing adequate outputs to achieve tribal goals and priorities?	<i>Not directly shown in logic model</i>
5. To what degree does GAP support EPA's strategic goal of increasing tribes' ability to build environmental program capacity?	(N)

IV. STRUCTURE OF THE REPORT

Following this introduction, Chapter 2 of the report presents the methodology used in conducting the evaluation, including study design, data sources, a plan for data analysis, quality assurance procedures, and strengths and weaknesses of the methodology. Chapter 3 presents the evaluation findings, organized by the five evaluation questions described in section III above. Chapter 4 presents the conclusions resulting from the evaluation findings and recommendations to AIEO for future improvements to GAP.

CHAPTER 2: GAP EVALUATION METHODOLOGY

This chapter summarizes key aspects of the methodology used to evaluate the General Assistance Program (GAP). The methodology begins with an overarching evaluation design, followed by a series of tasks undertaken in conducting the evaluation, including gathering and analyzing data, interpreting findings, and reporting results. The methodology also addresses quality assurance procedures used, and comments on the strengths and weaknesses of the evaluation design.

I. EVALUATION DESIGN

Most program evaluations, including the present study, are designed to address two overarching questions: 1) what are the program's outcomes, effectiveness, and impacts; and 2) how or why is a program effective or ineffective.¹ It is typically difficult to answer the first question definitively because it is often not possible to infer causal relationships between programs and measured outcomes and long-term impacts. Although randomized, controlled trials or experiments can isolate causal effects, it is very rare to be able to conduct a randomized, controlled study of government environmental programs. For example, in the present evaluation, in order to develop a randomized, controlled trial, it would be necessary to award GAP grants to only a subset of tribes chosen on a random basis, and then compare the outcomes of tribes that did receive grants to those that did not. Such a design would be impractical and questionable on legal and ethical grounds.

Since it is not possible to conduct a randomized, controlled experiment for this evaluation, we chose an alternate evaluation design. In this case, our evaluation design options were limited. For example, we could not conduct direct controlled trials, since we had no ability to control variables (e.g., the turnover rate and qualifications of tribal environmental staff, or the grantee caseload for EPA project officers) that might affect program outcomes. Moreover, we could not choose a quasi-experimental design, since that methodology relies on selecting comparison groups (i.e., comparing tribes that received a GAP grant to those that did not). It is not feasible to make this comparison since the vast majority of eligible tribes have received GAP grants. Those that have not received such funding are atypical and therefore would not present a valid basis of comparison (e.g., they are very small tribes, and thus may have inherently different abilities to achieve environmental capacity with or without GAP grants).

In light of these limitations, we conducted a non-experimental direct analysis. This type of evaluation examines only the subject group receiving the "intervention" (in this case, a GAP grant). Our evaluation incorporated aspects of a longitudinal study, which examines conditions of the study group over time. Specifically, we compared tribes that had GAP grants for a longer period of time compared to tribes that had GAP for a shorter period of time, to see whether tribes

¹ Office of Management and Budget (OMB), *What Constitutes Strong Evidence of a Program's Effectiveness?* Washington, D.C., OMB, 2004. Available from http://www.whitehouse.gov/omb/part/2004_program_eval.pdf. Accessed July 2005.

with more years of GAP funding had more effectively developed environmental capacity. For tribes that had GAP grants for a shorter period of time, we also compared an indicator of capacity (percentage of EPA funding derived from sources other than GAP) before and after GAP grants were awarded, to see if access to GAP grants led to an increase in funding diversification.

This evaluation addresses short term and intermediate outcomes achieved by GAP. However, GAP grants are limited to capacity-building and are not intended to cover program implementation (with the exception of solid and hazardous waste programs.)² Therefore, this evaluation focuses on short-term and intermediate outcomes (i.e., changes in tribal knowledge and behavior), rather than long-term outcomes, such as environmental and public health improvements, that would be achieved only through the implementation of tribal environmental programs.

II. STEPS FOR CONDUCTING THE EVALUATION

The four major steps taken to conduct this evaluation include: 1) identifying the information needed to answer the evaluation questions, 2) collecting and analyzing data from existing databases and files, 3) collecting and analyzing data from interviews panel discussions, and 4) reporting results and conclusions. Exhibit 2-1 lists the detailed tasks completed under each of these steps. The four steps are then discussed in more detail in the following sections.

² The purpose of GAP grants, which are defined by statute, are explained in the Indian General Assistance Program 2006 Grant Administration Guidance, available at <http://www.epa.gov/indian/pdfs/gap2006.pdf>. Accessed April 2007.

Exhibit 2-1: Steps for Conducting the Evaluation

A. Identify Information Needed and Prepare for Data Collection:

- 1) Establish data indicators.
- 2) Identify data sources.
- 3) Develop data collection tools (guides for interviews with EPA regional staff and focus groups with tribal representatives).

B. Collect and Analyze Data from Existing Databases and Files:

- 1) Select a sample of tribal GAP recipients.
- 2) Develop an evaluation database.
- 3) Collect quantitative and qualitative data from databases and grantee file reviews.
- 4) Categorize and code qualitative data.
- 5) Summarize data through descriptive statistical analysis.

C. Collect and Analyze Data from Interviews and Panel Discussions:

- 1) Identify regional GAP coordinators to interview.
- 2) Schedule and conduct interviews.
- 3) Select a sample of tribes for participation in group interviews.
- 4) Schedule and conduct group interviews.
- 5) Code responses from regional GAP interviews.
- 6) Analyze trends and patterns in data from interviews and group interviews.

D. Prepare Final Evaluation Report, in Accordance with EPA Guidelines:

- 1) Introduce GAP program and the purpose of the evaluation.
- 2) Describe methods for data collection and analysis.
- 3) Summarize key findings from quantitative and qualitative data analyses, and consider relationship between quantitative and qualitative findings.
- 4) Develop conclusions and identify lessons learned.
- 5) Propose recommendations.

A. Identify Information Needed and Prepare for Data Collection

In preparing this evaluation methodology, IEC identified specific types of information that could help answer each evaluation question (Appendix A). IEC developed this list of data needs in consultation with staff from AIEO and regional GAP Project Officers (POs). Indicators of environmental capacity were initially selected based on the statutory definition of tribal capacity, which was informed by tribal perspectives at the time that the statute was written (although tribal perspectives may have changed since that time). AIEO and the regional POs offered feedback on key indicators of tribal environmental capacity, guidance in defining the overarching indicator of capacity for tribes, and insight into the factors that may potentially impact tribes' achievement of environmental capacity. Tribal representatives had an opportunity to review and comment on the evaluation methodology, which included a description of the proposed indicators of environmental capacity. The final indicators of capacity were selected with all of this input in mind.

Regional POs also identified several databases that could supply needed data on tribal environmental programming efforts, including:

1. *GAP Accountability Tracking System (GAP database)* - This database, maintained by AIEO, contains records from a sample of GAP recipients who had received GAP funding prior to 2003 and provided documentation of their programming efforts under GAP. The database records include details on the grants awarded, activities conducted with GAP funds, and positions funded by GAP during the period October 2000 through September 2004.³ A total of 92 tribes are included in one or more of the tables in the GAP database, representing at least 20 percent of tribes in eight of EPA's ten regions.⁴
2. *Grants Information and Control System (GICS)* - This database, maintained by EPA's Office of Administration and Resources Management, contains records of all EPA grants, including all GAP grants. We received a pull of all GICS records of GAP and other EPA grants awarded to tribes from 1994 – 2004. The GICS data includes for each grant, the tribe name; region; award amount and date project end date, budget end date, and closeout date; and a description.⁵
3. *Audit Database* - (<http://harvester.census.gov/sac/dissemin/entity.html>). This database, maintained by the U.S. Census Bureau, contains information on audits of government grants to tribes and States, including audit findings and dates for EPA grants awarded to tribes.
4. *Strategic Goals Reporting System (5.3S-D)* - (https://oasint.rtpnc.epa.gov/TATS/tats_prv/entry_page). This database, maintained by AIEO, contains records on how GAP grants support EPA's Strategic Goal 5, Objective 5.3, which is to build tribal environmental capacity. The database contains records on the number of tribes per region that have achieved Treatment as a State (TAS), Direct Implementation Tribal Cooperative Agreements (DITCA), GAP Grants, Quality Assurance Project Plans (QAPPs), Tier III Tribal-EPA Environmental Agreements (TEAs), Performance Partnership Grants (PPGs), and other agreements (such as Memoranda of Understanding (MOUs), Memoranda of Agreement (MOAs), and Tier I & Tier II TEAs).

³ This time period corresponds with GAP work plan fiscal years 2000, 2001, 2002, and 2003. Unlike a federal fiscal year, which is named for the year ending in September, a GAP work plan year is named for the year beginning in October. For example, GAP work plan year 2000 began on October 1, 2000 and ended on September 30, 2001.

⁴ According to AIEO, 20 percent of tribes in most EPA regions were selected for inclusion in the GAP database, however, where needed, additional tribes were selected to make sure that at least two tribes were included in the GAP database from each Region.

⁵ In addition, POs recommended that we also review the IGMS database, which is a subset of the GICS database. We received and reviewed a data pull from IGMS of grants made to tribes from 1992 to 1999. However, since GICS contains more complete records, we used the data pull from GICS in lieu of the IGMS data.

In addition, AIEO and POs provided suggestions for other sources of information to supplement the data found in existing databases, including:

- Reviews of regional and/or tribal files, such as grant documents, correspondence, and related materials;
- Discussions with AIEO staff;
- Interviews with regional EPA staff that oversee GAP grants;
- Interviews with tribal representatives; and
- Review of EPA's strategic plan as it relates to GAP.

For each type of information needed to answer the evaluation questions, IEc worked with AIEO and the regional POs to identify the data source(s) most likely to provide pertinent information. Finally, IEc developed data collection tools to use in gathering data during interviews with POs and panel discussions with tribal representatives. These interview and discussion guides were designed to collect the types of information that could not be gathered through an analysis of existing databases, and are attached to this methodology as Appendices B and C.

B. Collect and Analyze Data from Existing Databases and Files

The existing databases provided by AIEO include many of the types of information needed to answer the evaluation questions. The databases include both quantitative information (e.g., the dollar amount of each grant), which can be summarized mathematically, as well as narrative descriptions (e.g., types of activities conducted with GAP funds). The GAP database represents a sample of tribes, thus, we used this existing sample and augmented it with information on additional tribes, as described below.

Sample Selection

The GAP database provided the starting point for our sample selection, since this database provides information specifically on GAP-funded activities conducted by tribes, without which we could not address the evaluation questions. AIEO initially populated the database from a random selection of tribes in Regions 1, 2, 4, 5, 6, 7, 8, and 9 that had received GAP funding prior to 2003 and provided documentation of their programming efforts under GAP. AIEO chose their sample for the GAP database by sampling at an equal rate within each EPA region to ensure that the representation of tribes in the database is consistent with the distribution of tribes in different parts of the country. (In Region 10, only a few tribes were included in the GAP database, representing only one percent of the tribes in the GICS database in the region that received GAP grants. There are no federally recognized tribes in Region 3, so none were included in the GAP database from this region.) We felt it was important to maintain this geographic representation in the sample selected for this evaluation, since tribes in different parts of the country vary in size, resources, and other characteristics that may affect tribal environmental capacity.

Two tables within the GAP database – the Activity and Position tables – contain information needed to help answer the evaluation questions pertaining to use of GAP funds. As shown in Exhibit 2-2, a total of 66 tribes that are included in the GICS database are listed in both of these tables.⁶ These 66 tribes represent eight EPA regions and 13 percent of the 500 tribes that have received GAP grants between 1994 and 2004, according to the GICS database.⁷ Note that Regions 2 and 10 are considerably underrepresented in the Activity and Position tables. Were these regions excluded from the analysis, the records in the GAP database would represent 22 percent of tribes that received GAP grants between 1994 and 2004. In order to provide each region with approximately equal representation in the evaluation sample, we set the final number of tribes to be selected from each region as close to 22 percent as possible. For some regions (2, 9, and 10) with fewer tribes in the Activity and Position tables, we randomly selected additional tribes not included in the GAP database to include in the final sample. We used grant files and related documents for these additional tribes obtained from the POs to fill in the types of data that would otherwise be included in the GAP database. For other regions (5, 6, 7, and 8), we randomly selected from among tribes in the Activity and Position tables to ensure approximately 22 percent of each region's tribes would be included in the sample. Appendix D lists the tribes included in our sample.

Where records in the GAP database included in our sample turned out to be incomplete or inadequate for a particular question, we did not analyze the data for that tribe for that question. The same held true with file reviews: if a file had incomplete data, we analyzed the available data, rather than select a different record for inclusion in the sample. We characterized any significant data gaps as part of our analysis.

⁶ There is one tribe included in the GAP activity and position tables that is not included in the GICS database. Since information from all three of these sources is important to the analysis, we did not include this tribe in our sampling pool, and it is not reflected in the totals in Exhibit 2-2. Also note that we did not include intertribal consortia in our sample (although they are represented in the GICS and GAP databases), since including these consortia could result in double-counting of tribes that received GAP both independent of and as part of a consortia.

⁷ Note that Region 10 tribes eligible for GAP grants, and therefore included in this analysis, do not include Alaska Native regional or village corporations. The reason for this exclusion is explained in 2000 GAP Guidelines, *Indian Environmental General Assistance Program Guidelines on the Award and Management of General Assistance Agreements for Indian Tribes*, available at <http://www.epa.gov/indian/pdfs/gap2000.pdf> last accessed May 2007.

**EXHIBIT 2-2: COUNT OF TRIBES RECEIVING GAP GRANTS
COMPARED TO COUNT OF TRIBES IN THE GAP DATABASE, BY REGION**

EPA Region	Number of Tribes Receiving GAP Grants 1994-2004^(a)	Number of Tribes in Activity and Position Tables of GAP Database^(b)	Percent of Tribes Receiving GAP Grants in the Activity and Position tables	Final Number of Tribes to be Included in Evaluation Sample	Number of Tribes in Evaluation Sample as a Percent of Tribes Receiving GAP Grants 1994-2004
1	8	2	25%	2	25%
2	3	0	0%	1 ^(c)	33%
4	6	1	17%	1	17%
5	33	9	27%	7 ^(d)	21%
6	64	16	25%	14 ^(d)	22%
7	8	5	63%	2 ^(d)	25%
8	27	8	30%	6 ^(d)	22%
9	135	22	16%	30 ^(c)	22%
10	216	3	1%	48 ^(c)	22%
Total	500	66	13%	111	22%
<i>Total excluding Regions 2 and 10</i>	<i>281</i>	<i>63</i>	<i>22%</i>	<i>NA</i>	<i>NA</i>

Note: Region 3 has no federally recognized tribes and is omitted from the sample.

Sources:

(a) Number of tribes is based on a count of tribes in the GICS database with the IGMS Program Code "GA", "NI", or "BG", or the CDFA Number of 66.9, 66.92 or 66.926. These codes represent tribes that have received funding under the Indian Environmental General Assistance Program (GAP).

(b) Number of tribes is based on a count of tribes in the GAP database listed in the "activity_info" and "position_info" tables.

(c) Final sample size in these regions includes additional tribes not included in the GAP activity and position tables, to be selected at random from tribes receiving GAP grants prior to 2003.

(d) Final sample size in these regions includes fewer tribes than are included in the GAP database, so that the region does not have a disproportionate percent of its tribes represented. The tribes to be included will be randomly selected from the tribes with records in the GAP database.

Data Collection and Analysis

Following section of the tribal sample, IEC began data collection and analysis. We designed an Access database to combine information from each of the existing databases: the GAP database, GICS, the Audit database, and the Strategic Goals Reporting System. For each tribe sampled, we collected data from the four databases corresponding to each evaluation question and entered them in summary tables in our Access database. To assist in the analysis of qualitative data obtained from GAP file reviews, such as descriptions of personnel hired with GAP funds or types of environmental activities completed, we assigned codes prior to entering them into the Access summary tables. We used the same coding protocol that AIEO used in developing the GAP database, in order to ensure as much consistency as possible between the data gathered

from existing databases and that gathered from file reviews.⁸ A list of the codes used is included in Appendix E.

We used statistical methods to summarize and analyze the data in the existing databases. Most of the evaluation questions could be answered by descriptive statistics – including the range, mean, median, standard deviation, and/or proportion – for key indicators. For example, to answer the question, "How often are GAP resources accessed?" we considered the percentage of tribes in our sample that participated in technical and programmatic training opportunities. We also used statistics to draw inferences about the total population of tribes receiving GAP grants.^{9,10} For qualitative data, such as EPA media program categories or staff titles, we calculated counts and percentages to describe patterns and identify trends.

The one evaluation question that cannot be adequately addressed by descriptive statistics is, "What is the relative contribution of GAP toward the achieving environmental capacity?" In order to answer this question, we compared tribes that had GAP grants for a longer period of time ("early adopters") to tribes that had GAP for a shorter period of time ("late adopters"), to see whether tribes with more years of GAP funding had more effectively developed environmental capacity, as measured both by the percent of EPA funding attributable to GAP and achievement of specific indicators of environmental capacity. For late adopters, we also compared the percentage of EPA funding derived from sources other than GAP before and after GAP grants were awarded, to see if access to GAP grants led to an increase in funding diversification.

Exhibit 2-3 summarizes each type of information that we gathered from the existing databases and the type of analysis we conducted for each type of data. The primary unit of analysis in this evaluation is the tribe. We used descriptive statistics to summarize the status of tribes with regard to evaluation questions 1, 2, and 3a. For the sake of brevity in the table, we refer to calculating "averages" and "percentages." Where it is noted that we calculated an average, we in fact calculated the sample range, mean, median, and standard deviation, in order to provide a full

⁸ The coding categories can be found in Appendix A of the report EPA American Indian Environmental Office Gap Accountability Tracking System, Developed for AIEO, draft October 6, 2003. The document was provided by AIEO to IEC.

⁹ Our statistical calculations assumed that we had obtained a large or approximately random sample of the population. In cases where these conditions were not met, we did not develop inferences about the whole population of tribes.

¹⁰ We analyzed all tribes across Regions in a single set of descriptive statistics. Where it seemed relevant, we also calculated separate sets of descriptive statistics for tribes in each Region.

description of the data. We also estimated the population mean, which is reported with the confidence level and confidence interval. Where it is noted that we calculated a percentage, we calculated the sample proportion as well as an estimate of the population proportion, which is reported with the confidence level and confidence interval. The results of this inferential analysis are included in Appendix F.

EXHIBIT 2-3: ANALYSIS OF INFORMATION GATHERED FROM EXISTING DATABASES

Evaluation Question	Analytic Approach ^(a)	Analytical Method
1a. Is GAP being accessed by all federally recognized tribes?	<ul style="list-style-type: none"> Number and percentage of federally recognized tribes that have received GAP funds between 1994 and 2004. 	<ul style="list-style-type: none"> Calculate the number and percentage of tribes based on the total population of GAP grants in the GICS database, rather than a sample.
2a. Are tribal governments using the resources (technical, fiscal, and programmatic) provided as a component of GAP? How often are GAP resources accessed?	<ul style="list-style-type: none"> Amount and type of GAP resources that have been delivered to and accessed by tribes: <ul style="list-style-type: none"> <i>Fiscal resources:</i> GAP funding provided to tribes <i>Technical resources:</i> Technical assistance and media specific trainings <i>Programmatic resources:</i> Grants management training 	<ul style="list-style-type: none"> Calculate average amount of grant award(s). Calculate percentage of tribes that have received technical assistance and media specific trainings among GAP-funded activities. Calculate percentage of tribes that have received programmatic resources (e.g. grants management training) and calculate the average number of grants management trainings described among each tribe's GAP-funded activities.
2b. How are tribes using GAP resources?	<ul style="list-style-type: none"> Tribal staff and activities funded through GAP 	<ul style="list-style-type: none"> Categorize and code activities, and then calculate percent of tribes conducting each type of activity. Include solid waste implementation in GAP-funded activities.
2c. To what extent have tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?	<ul style="list-style-type: none"> Timing of grant end date vs. final close out of the grant – according to regional POs, the shorter the period of time between grant end date and final closeout, the more likely that tribes met expectations. Note that other factors such as EPA project officer turnover, lack of FTE, or lack of EPA's emphasis on closeouts could affect this indicator. Results of administrative post award monitoring audits. 	<ul style="list-style-type: none"> Calculate the average number of months between grant end data and final closeout data for those grants with an action code "FC" in the GICS database, meaning the grant has been closed out. Calculate the percent of tribes that were audited and had a reportable condition, material weakness, and/or material non-compliance finding as a result of the audit.

EXHIBIT 2-3: ANALYSIS OF INFORMATION GATHERED FROM EXISTING DATABASES

Evaluation Question	Analytic Approach^(a)	Analytical Method
<p>3b. To what extent have tribes achieved environmental capacity as suggested by the presence of indicators of environmental capacity?</p> <p><i>Note, the indicators of environmental capacity were selected based on the purpose of GAP as described in the GAP program guidelines as well as input from regional POs early in the evaluation process and feedback from tribal representatives on the draft evaluation methodology.</i></p>	<p>Overarching Indicator of Environmental Capability</p> <ul style="list-style-type: none"> The sequence of GAP and non-GAP grant funding secured by GAP recipients over time 	<ul style="list-style-type: none"> Describe the sequence of GAP funding relative to non-GAP funding received by tribes; calculate the number and percentage of tribes that received non-GAP funding before, during, and after receiving GAP funding.^(b)
	<p>Legal Capability</p> <ul style="list-style-type: none"> GAP recipients that have developed tribal codes, standards, and/or enforcement programs to control pollution GAP recipients that have adopted or implemented tribal codes, standards, and/or enforcement programs to control pollution 	<ul style="list-style-type: none"> Query the activities field in the database to identify developing codes, standards, and similar activities in the database, and then calculate the number and percentage of tribes that mention these among their GAP activities. To the extent possible, distinguish between codes, standards, etc. that have been developed versus those that have been adopted or implemented.
	<p>Enforcement Capability</p> <ul style="list-style-type: none"> Presence of tribal environmental staff person(s) charged with enforcement duties 	<ul style="list-style-type: none"> Calculate the number and percentage of tribes for which records show enforcement or inspection among the activities funded by GAP, or that have a position description that mentions enforcement or inspection.
	<p>Technical Capability</p> <ul style="list-style-type: none"> GAP recipients with one or more staff specifically tasked with managing environmental programs Size and composition of tribal environmental staff Environmental programs being carried out in different media annually by tribes GAP recipients that have taken environmental training 	<ul style="list-style-type: none"> Calculate the percentage of tribes that have a position of "Environmental Director" or an equivalent term, or that have a position with a "Professional" category code. Calculate average number of staff members listed by each tribe in the sample, and the percentage of overall positions that are classified as Professional, Administrative, Technical, Legal, Clerical, or Other. Query the database to identify activities associated with air, water, and waste programs, and then calculate the number and percentage of tribes conducting each type of activity. Calculate the number and percentage of tribes that list environmental training as among their activities.

EXHIBIT 2-3: ANALYSIS OF INFORMATION GATHERED FROM EXISTING DATABASES

Evaluation Question	Analytic Approach^(a)	Analytical Method
	<p>Communications Capability</p> <ul style="list-style-type: none"> • GAP recipients that have conducted community education and outreach, based on the grant work plan • GAP recipients that have executed agreements with other jurisdictions for management of on- or off-reservation resources • Tribal participation in EPA or tribal workgroups and/or Task Forces 	<ul style="list-style-type: none"> • Calculate the number and percent of tribes that list community education, outreach, or similar terms among their activities. • Calculate the number and percent of tribes that list inter-governmental agreements among their activities. • Calculate the number and percent of tribes that list participation in workgroups or task forces among their activities.
<p>3c. What factors contribute to the achievement of environmental capacity, and what is the impact of each factor?</p>	<p>Tribal Funding</p> <ul style="list-style-type: none"> • GAP funding amounts • GAP funding consistency over time 	<ul style="list-style-type: none"> • Calculate average amount of GAP award. • Calculate the average number of consecutive GAP grants received per tribe over time.
<p>3d. What is the relative contribution of GAP toward achieving capacity?</p>	<ul style="list-style-type: none"> • Non-GAP grant funding amounts • Sequence of EPA grants received by tribes 	<ul style="list-style-type: none"> • Calculate average amount of funding from non-GAP, EPA grants. Compare percentage of non-GAP EPA funding between early and late adopters, and for late adopters, before and after receiving a GAP award. • Calculate the percent of tribes that received GAP funding before securing other funding. Note, we do not have data to assess funding from outside of EPA, e.g. grants from BIA or tribes' internal funds, which limits the conclusions that we can draw.

EXHIBIT 2-3: ANALYSIS OF INFORMATION GATHERED FROM EXISTING DATABASES

Evaluation Question	Analytic Approach^(a)	Analytical Method
<p>5. To what degree does GAP support EPA's strategic goal of increasing tribes' ability to build environmental program capacity?</p>	<ul style="list-style-type: none"> • Summary of GAP goals and objectives • Summary of EPA's strategic goal 5, objective 5.3, and related targets for building tribal capacity • Summary of progress towards EPA's strategic targets under objective 5.3, as reported in the Strategic Goals Reporting System • Summary of findings on the extent to which GAP appears to support tribes' development of environmental capacity. 	<ul style="list-style-type: none"> • Review GAP goals and objectives contained in EPA's <i>Indian Environmental General Assistance Program: Guidelines on the Award and Management of General Assistance Agreements for Indian Tribes</i> (U.S. EPA, 2000) and <i>Report to Congress: The Indian Environmental General Assistance Program</i> (U.S. EPA, 2001) • Compare Goal 5.3, Build Tribal Capacity, and other strategic goals with relevance to tribes that are included in EPA's <i>2003-2008 Strategic Plan</i> (U.S. EPA, 2003) with the range of tribal environmental programs documented in the EPA 5.3S-D.

(a) Information to be collected from GAP database, GICS, Audit Database, and 5.3 S-D, supplemented by File Reviews for Regions 2, 9, and 10.

(b) Securing funding in addition to GAP has been identified as both an indicator of tribal environmental capacity and a factor influencing achievement of environmental capacity by regional POs. Through interview discussions and focus groups, we will try to understand whether securing other sources of funding is more a cause or effect of success in the GAP program.

A potential source of bias in our analysis is the selection of tribes for our sample based on the availability of comprehensive tribal records. If the tribes with data in the Activity and Position tables tend to differ systematically from tribes that are not represented in these tables, then our sample would not be truly representative. This could also be true if tribes in the GAP database are not represented in the Activity and Position tables because their records are incomplete, suggesting that perhaps these tribes have less administrative capacity than those that are included. On the other hand, if the Activity and Position tables are incomplete for reasons unrelated to tribal characteristics (e.g., the time and resources available to EPA to populate the database) there might not be a bias in our sample. To assess this potential bias, we compared tribes in our sample that are *not* included in the Activity and Position tables to tribes that *are* included in those tables to see if they differ significantly for the analysis of activities funded by GAP. The results of this analysis are included in Appendix G. Overall, the tribal participation rates for different types of activities funded by GAP seem similar for tribes included in the GAP database tables and those for which we conducted file reviews. The only substantial difference is that tribes assessed through the file reviews appear to conduct more communication and baseline assessment activities than tribes included in the database analysis. We do not believe this difference is sufficiently large to limit our ability to draw inferences about the whole population of GAP grants. Due to the scope of the evaluation, it was not possible to conduct further tests on the GAP database to rule out potential sources of bias. However, we reviewed the description of the methodology used in preparing the database, and we did not find any notable sources of bias. We are aware that AIEO is making an effort to improve its data tracking over time, and the GAP database was developed as a prototype of a more comprehensive database that AIEO is now compiling.

C. Collect and Analyze Data from Interviews with Regions and Tribes

To complement the analysis of data from the EPA databases, we conducted individual interviews with EPA staff from eight regions and panel discussions with representatives from an array of tribes. As discussed above, we used the data from existing databases to develop an initial analysis of the extent of tribes' use of GAP, how tribes are using GAP resources, the degree to which tribes are meeting GAP grants management expectations, the extent to which tribes have achieved environmental capacity as demonstrated by key indicators, and the degree to which different factors may be associated with key indicators of environmental capacity. However, our ability to accurately answer the evaluation questions was greatly enhanced by soliciting feedback on and interpretation of this initial analysis by regional POs and tribal representatives who have personal experience issuing and implementing GAP grants. We presented POs and tribal representatives with an abbreviated summary of our analysis and asked for their help in understanding the data, and identifying any situations where they felt the data may be misleading or incomplete. In addition, we relied on POs and tribal representatives to provide information for a number of questions that are not addressed at all in the existing databases. Our approach to sample selection, data collection, and data analysis are described in detail below.

Sample Selection

We conducted one-hour telephone interviews with EPA POs located in eight regions, and one cross-regional representative. (The names of specific interviewees are included in Appendix H.) In order to be sure that the interviewees had sufficient experience with GAP grants to be able to

answer our questions, we interviewed current POs if they had a minimum of two years of experience working with GAP grants in the region they represent. If a current PO did not have this minimum level of experience, we interviewed a former PO for that region, if available.

We also conducted 2-3 hour panel discussions with representatives from a subset of nine tribes that have received GAP grants in the past five years. The interviews were held in conjunction with existing gatherings of GAP grantees, in order to facilitate participation of tribes. Each session was scheduled for a different part of the country, to provide geographic diversity among the tribes participating. The tribal panelists were selected by the regional EPA staff organizing each meeting to achieve two objectives: to include different types of tribes and ensure that the representatives had detailed knowledge of GAP grants and tribal environmental programming.

In addition to tribal representatives on the panel, we invited other tribes attending the gathering to attend the session if they wished. For each set of interview questions answered by the panelists, IEC opened the discussion to include comments and questions from the tribal representatives assembled in the audience. This approach allowed for a greater range of tribal input on the interview questions for those tribes that wished to provide comments. We also provided each invited tribal representative with the set of interview questions in advance, so they could solicit feedback from other tribes in their region if they wished. The names of tribes participating in the panel discussions are included in Appendix I.¹¹

We recognize that relying on EPA to select tribal representatives from among attendees at an EPA-sponsored GAP event did not provide a sample representative of the population of GAP grantees; we assumed that the tribes that participate in such an event are more likely to be active partners in GAP and other EPA programs than tribes that eschew them. Tribes that actively collaborate with EPA and other tribes on GAP projects may have different experiences and perspectives than those that do not. Despite this likely source of bias from the group interviews, we believe this approach was the most feasible way to gather information from tribal representatives. Moreover, while recognizing the limitations of this proposed sample of tribal representatives, we believe that this group was able to provide insights and illustrative examples about how GAP grants work for tribes that are especially engaged with EPA on the GAP program.

Data Collection and Analysis

The interviews and panel discussions address aspects of the evaluation questions that are not covered or cannot be fully addressed in our analysis of the EPA databases (see Exhibits 2-4 and 2-5). In addition, these forums provided POs and tribal representatives with the opportunity to offer their interpretations of and feedback on the results of the preliminary analysis we conducted with information from the EPA databases. Interviews with POs included structured and open-ended questions; Appendix B includes the interview guide for POs. Appendix C includes the tribal discussion guide.

¹¹ Due to inclement weather, we were unable to conduct a session with tribal representatives in the Eastern region of the U.S. We instead conducted individual telephone interviews with each of the three panelists selected for that session.

**EXHIBIT 2-4:
INFORMATION GATHERED IN INTERVIEWS WITH REGIONAL GAP PROJECT OFFICERS**

Evaluation Question	Information Sought from Regional Project Officers to Help Answer Evaluation Questions
1b. Why are some tribes not involved in GAP?	<ul style="list-style-type: none"> • Perceptions as to why tribes may not seek GAP funding; perceptions on ability of tribes to initiate environmental programs without it
1c. Are there tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?	<ul style="list-style-type: none"> • Perceptions as to why tribes may have dropped off the GAP grant rolls
2c. To what extent have tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?	<ul style="list-style-type: none"> • Regional POs' perceptions about the quality, timeliness, and completeness of work plans and progress reports received
3a. What indicators of tribal environmental capacity exist? 3b. To what extent have tribes achieved environmental capacity as suggested by the presence of these indicators?	<p><i>Administrative Capability:</i></p> <ul style="list-style-type: none"> • How long has the tribal staff person tasked with managing environmental programs (e.g. Environmental Director) been in that position? • Major findings on A133 audits • Results of on-site grants management review
3c. What factors contribute to the achievement of environmental capacity, and what is the impact of each factor?	<ul style="list-style-type: none"> • Degree of tribal council support for environmental programs • Does tribe have clear environmental priorities? • Rate of change in tribal governments - how often do Council members change? • Turnover rate of tribal Environmental Director and/or staff • Qualifications of tribal Environmental Director and/or staff • Degree of information sharing among tribes • Degree to which tribes request information from EPA • Structure of EPA regional office - specifically, at what level the tribal office located (in the administrators office or elsewhere) • Experience and longevity of POs
5. To what degree does GAP support EPA's strategic goal of increasing tribes' ability to build environmental program capacity?	<ul style="list-style-type: none"> • How do GAP's <i>goals</i> currently align with or diverge from EPA's strategic goal for GAP and other multi-media programs?
	<ul style="list-style-type: none"> • How do GAP's <i>objectives</i> align with or diverge from EPA's strategic goal for GAP and other multi-media programs?
	<ul style="list-style-type: none"> • How do tribal GAP <i>activities</i> align with or diverge from EPA's strategic goal for GAP and other multi-media programs?

EXHIBIT 2-5: INFORMATION GATHERED IN PANEL DISCUSSIONS WITH TRIBAL REPRESENTATIVES	
Evaluation Question	Information Sought from Tribal Representatives to Help Answer Evaluation Questions
1b. Why are some tribes not involved in GAP?	<ul style="list-style-type: none"> • Perceptions as to why tribes may not seek GAP funding; perceptions on ability of tribes to initiate environmental programs without GAP
2d. How does participation in GAP increase understanding of how to develop a tribal environmental program?	<ul style="list-style-type: none"> • Self reported increase in knowledge and understanding about the necessary steps in developing a tribal environmental program • Self-reported increase in skills needed to develop tribal environmental programs • Self-reported change in awareness and commitment to environmental programs in tribes
3a. What indicators of tribal environmental capacity exist? 3b. To what extent have tribes achieved environmental capacity as suggested by the presence of these indicators?	<ul style="list-style-type: none"> • Tribes' perceptions of key indications of environmental capacity. <p><i>Communications Capability:</i></p> <ul style="list-style-type: none"> • Extent of tribal environmental staff's communication of with tribal Council <p><i>Other capabilities (legal, enforcement, technical, administrative) not fully addressed in the analysis of EPA databases.</i></p>
3c. What factors contribute to the achievement of environmental capacity, and what is the impact of each factor?	<ul style="list-style-type: none"> • Degree of tribal Councils' support for environmental programs • Do tribes have clear environmental priorities? • Rates of change in tribal governments - how often do Council members change? • Turnover rates of tribal Environmental Director and/or staff • Qualifications of tribal Environmental Director and/or staff • Degree of information sharing among tribes • Availability of non-grant tribal funding
3d. What is the relative contribution of GAP toward achieving capacity?	<ul style="list-style-type: none"> • Sequence of grants received by tribes (i.e., do tribes receive GAP grants before other grants? If so, this would suggest that GAP may contribute to ability to receive other grants) • Availability of non-grant tribal funding
4. Is the GAP providing adequate outputs to achieve tribal goals and priorities?	<ul style="list-style-type: none"> • Tribes' perceptions about whether GAP is providing the type and amount of resources that they need to meet their environmental goals and priorities • Are there additional resources that tribes feel they would need to have in order to address their goals and priorities? • Is environmental capacity building a priority for tribes receiving GAP grants?

The first step in analyzing the data collected through the interviews and panel discussions involved broadly categorizing and summarizing responses and using them to qualify the results of our quantitative analysis. We also captured comments that, in our judgment, synthesize the views expressed by interviewees and panel discussion participants. In this way, our analyses and conclusions reflected the insights and perspectives provided by POs and tribal representatives.

D. Prepare Final Evaluation Report

This report constitutes the final evaluation report, which has been prepared in accordance with EPA guidelines.

III. QUALITY ASSURANCE PROCEDURES

Two parts of this evaluation required a quality assurance review. We first needed to ensure that the way we coded data during our review of tribal GAP files was consistent with the coding of data already in the GAP database. To meet this requirement, we used the same coding categories used by EPA to create the GAP database, and we reviewed these categories with AIEO staff to be sure we understood how to interpret them. We created a standardized code sheet to use for all file reviews, and coordinated between IEC staff conducting the reviews to ensure coding consistency (Appendix E). Finally, in cases where we had questions about interpretation, we referred the questions to AIEO staff.

The second part of this evaluation requiring a quality assurance review is the analysis itself (e.g., calculation of descriptive statistics, populations proportions, and population means, as well as characterization of qualitative information gathered in the interviews and panel discussions). All quantitative computations and analyses have been reviewed by at least one manager to ensure accuracy. With regard to the qualitative information from interviews and panel discussions, IEC used interview guides to ensure consistency in the way we asked questions during discussions with EPA staff and tribal representatives. IEC also had a staff person present to type notes during each interview (this recorder was usually not the same person who conducted the interviews). In most cases the notes recorded were comparable to a transcript (although some information was summarized to keep pace with the flow of the conversation). We compiled the interview notes into summary documents, and grouped together responses to each interview question to facilitate their characterization. Where interviews produced quantitative information (e.g., ranked responses to questions posed along a Leichart scale), we analyzed these responses mathematically. We made the draft summary of our results available to POs and tribal representatives that we interviewed to allow them to correct any inaccuracies in our interpretation of their comments, however no corrections were submitted.

IV. STRENGTHS AND WEAKNESSES OF THE EVALUATION DESIGN

The strengths of this analysis are that it answers the specific evaluation questions posed by AIEO, and it draws on both quantitative and qualitative data to answer them. The methodology underwent extensive peer review (with comments provided by EPA staff, tribal representatives, and academic reviewers) and we modified the evaluation design in light of the comments received. Academic reviewers noted that while the evaluation would not meet the requirements of a formal academic evaluation, the analytical rigor is appropriate for the budget and time available to conduct it.

The final evaluation methodology varies only slightly from the proposed methodology that underwent peer review. The most significant change is that the original methodology proposed conducting a regression analysis to assess the correlation between index of environmental

capacity and key indicators, such as the amount of GAP funding. In retrospect, pursuing this analysis would have been ill advised. Based on what we heard in interviews, we believe there are many confounding factors (e.g., tribal population and land base, degree of cohesiveness of tribal land holdings, and tribal socio-economic status) that could influence a tribe's achievement of environmental capacity, in addition to the indicators that we can measure, such as the amount of GAP funding. Accounting for all these factors was beyond the scope of this investigation. We opted instead to compare early vs. late adopters of GAP, to see if tribes' access to GAP for a longer period increased the degree to which they had achieved capacity. If true, this would suggest that access to GAP contributes to tribes' ability to develop environmental capacity.

A key limit of this methodology, both in its original and final form, is that it does not prove that GAP caused the changes in tribal environmental capacity described in Chapter 3. However, qualitative interviews suggest that GAP has indeed been an essential resource in helping tribes build their environmental programs. Another limitation of our analysis is that since the tribes included in the panel discussions are not necessarily representative of all GAP grantees, we cannot rely on information from these sessions to make inferences about GAP grantees as a whole. However, given the time and budget limitations of the analysis, and U.S. Information Collection Request (ICR) restrictions, we were not able to interview a larger sample of tribes that would be representative of GAP grantees as a whole.

Although this evaluation design significantly limits the types of conclusions and our ability to generalize them to the larger population of GAP grantees, in our judgment, it is the best methodology available given the characteristics of the program under evaluation. Moreover, this evaluation design is well adapted for understanding how and why a program is effective, which can provide useful information for program management.

CHAPTER 3: GAP EVALUATION FINDINGS

This chapter presents the findings from IEC's evaluation of the General Assistance Program (GAP). The findings are based on a review of records for a sample of 111 tribes awarded GAP grants, stored in four federal databases: the EPA GAP Accountability Tracking System and Strategic Goals Reporting System, both maintained by EPA's American Indian Environmental Office (AIEO); the Grants Information and Control System (GICS) maintained by EPA's Office of Administration and Resources Management; and the Audit Database maintained by the U.S. Census Bureau. Where needed, records in the databases were supplemented by file reviews of GAP progress reports maintained by EPA regions. Statistics presented in the narrative are based on the sample of 111 tribes. Appendix F includes inferences based on this sample about characteristics for the entire population of GAP grantees. Information obtained from these databases, with the exception of the GAP database, span the years 1994-2004, unless otherwise noted. Due to the limitations of the version of the GAP database used for this evaluation, tribal activity and position data only cover the period October 2000 through September 2004.¹ The activity table in the database contains records of discrete activities conducted by tribes during this period but does not track the overall effort and time expended by tribes to carry out each activity.²

In addition to information from the databases and file reviews, these findings are informed by interviews with EPA project officers (POs), and a series of panel discussions and interviews with tribal representatives. Information from these interviews and discussions is drawn from the experience of the interviewee, which encompasses recent years and may date back to 2000 or earlier.

The findings are organized around the five evaluation questions, as follows:

- I. Is the GAP being accessed by all federally recognized Tribes? If not, why are some Tribes not involved in GAP? Are there Tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?
- II. Are Tribal governments using the resources (technical, fiscal, and programmatic) provided as a component of GAP?
 - A. How often are they accessed?
 - B. How are Tribes using these resources?
 - C. To what extent have Tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?

¹ This time period corresponds with GAP work plan fiscal years 2000, 2001, 2002, and 2003. Unlike a federal fiscal year, which is named for the year ending in September, a GAP work plan year is named for the year beginning in October. For example, GAP work plan year 2000 began on October 1, 2000 and ended on September 30, 2001. Thus, the time period for which GAP data are available extends from October 2000 through September 2004.

² This data limitation may create the impression that tribes which reported fewer activities in a given program area were less active in building capacity than tribes which reported more activities in that area, however, certain capacity building activities are ongoing, and thus may represent a substantial effort for the tribe even if they are only counted in the database once for any given reporting period.

- D. How does participation in GAP increase understanding of the process required to develop a Tribal environmental program?
- III. What indicators of Tribal environmental capacity exist?
- A. To what extent have Tribes achieved environmental capacity as suggested by the presence of these indicators?
 - B. What factors contribute to the achievement of environmental capacity, and what is the impact of these factors?
 - C. What is the relative contribution of GAP toward achieving capacity?
- IV. Is the GAP process providing adequate outputs to achieve Tribal goals and priorities?
- V. To what degree does GAP support EPA's strategic goal of increasing Tribes' ability to build environmental program capacity?

Based on these findings, the next chapter discusses recommendations and conclusions of the evaluation.

I. FEDERALLY RECOGNIZED TRIBES' ACCESS TO GAP

GAP is utilized by a significant majority of federally recognized tribes. From 1994-2004, 500 of the 561³ federally recognized tribal governments in the United States received at least one GAP grant. This means that approximately 89 percent of tribes received a GAP grant during this time period.⁴

IEc interviewed EPA POs from eight regions, who work directly with tribes to administer their GAP grants. We asked POs whether they knew of any federally recognized tribes in their regions that had not received GAP grants since 1994, and if so, why these tribes did not receive GAP funding. The POs indicated that only a few tribes in their regions had not received GAP grants. Tribes in four regions had adopted a policy of not accepting federal grant money. In addition, POs in two regions shared their perspective that some tribes have not applied for GAP funding because they are too small and do not understand how to use GAP, or because they do not have the basic infrastructure to apply for the funding. POs in two other regions explained that tribal performance issues, such as non-reporting or fiscal mismanagement, had made some tribes ineligible for EPA funds. Lastly, in one region, there was a time when the regional office did not have sufficient staff to process all incoming GAP applications, and the region ended up denying grants to tribes whose proposals it deemed insubstantial.

We also asked POs whether any tribes in their regions had at one time received GAP grants, but no longer receive GAP funding, and if so, what caused them to drop off the GAP grant rolls.

³ Bureau of Indian Affairs (BIA). 2007. *Bureau of Indian Affairs*. Washington, D.C., BIA. Available from <http://www.doi.gov/bureau-indian-affairs.html>. Accessed April 2007.

⁴ These results were obtained through an analysis of EPA's Grants Information and Control System (GICS) database records between 1994 and 2004, and are based on an analysis of GAP funding provided to all 561 federally recognized tribes.

Many POs responded that one or more tribes in their region had received a GAP grant between 1994 and 2004, but had since dropped off the GAP grant rolls. At least two tribes in one region had their own financial resources from successful casinos and decided not to apply for GAP funding in order to free up that funding for other tribes. In another region, staff turnover left some small tribes without staff to manage their GAP grants. In a few cases, performance issues or fiscal mismanagement left tribes temporarily ineligible for GAP funding. Once tribes resolved these issues they became eligible for GAP grants again. Finally, one tribe lost its federal recognition, and thus was no longer eligible for GAP funding.

We then asked POs if the lack of GAP grants hindered the development of environmental programs for tribes that did not receive GAP grants. The POs explained that except for those tribes with significant financial resources of their own, the lack of GAP funding did hinder the development of tribal environmental programs. Tribes without GAP funding or substantial revenue streams of their own have not been able to devote sufficient effort to their environmental programs. These tribes missed networking opportunities and had to rely on EPA for permitting and enforcement. One PO explained, however, that the temporary loss of GAP grants due to fiscal mismanagement ultimately benefited certain tribes, because it led them to reevaluate their efforts and make administrative improvements to access GAP in the future.

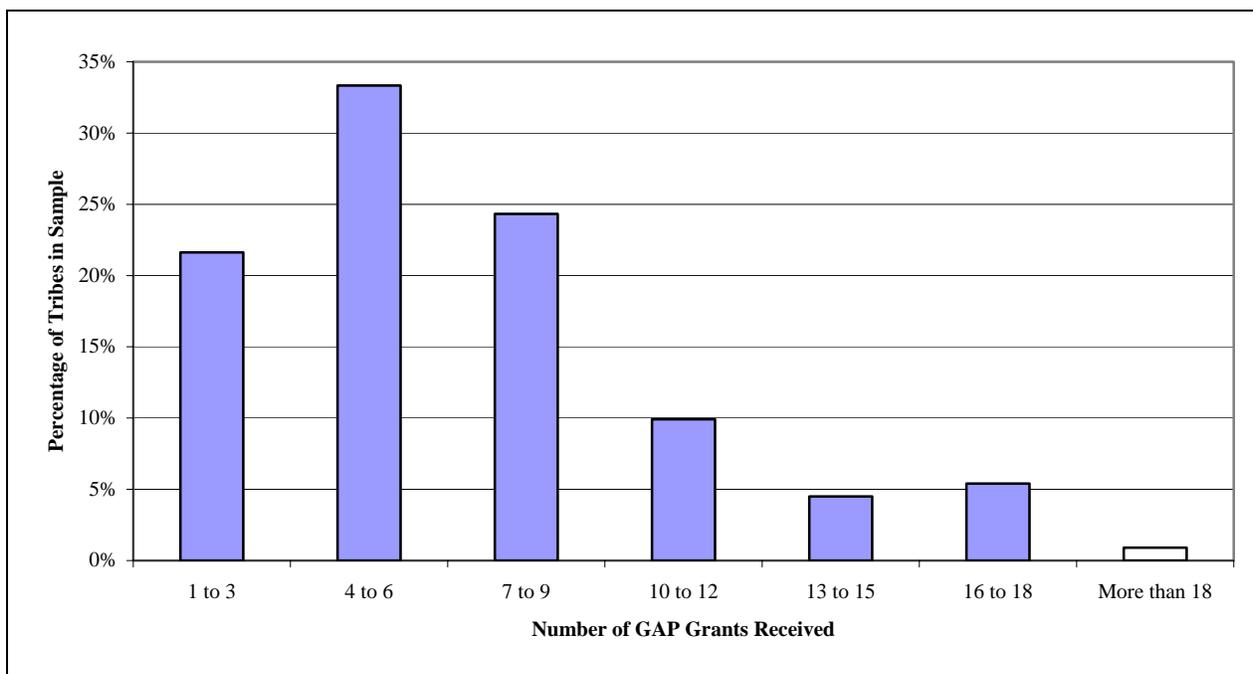
II. TRIBAL UTILIZATION OF RESOURCES PROVIDED BY GAP

GAP provides funding as well as technical and programmatic assistance to tribes. Technical assistance may include: EPA-sponsored training, linking tribal staff with EPA media program contacts, EPA review of tribal proposals for establishing programmatic capability, and site visits. For the purpose of this evaluation, we have defined programmatic assistance as any EPA-sponsored training or outreach directed toward improving tribal administration of GAP grants. One objective of the evaluation is to determine whether tribes are accessing the array of resources (fiscal, technical, and programmatic) provided as a component of GAP, and how often they access these resources. The evaluation also seeks to assess how tribes' participation in GAP and their use of GAP resources influences the way tribes approach developing and administering their environmental programs.

A. Tribes Access of GAP Resources

GAP funds received by tribes constitute the most critical resource provided by GAP. The 111 tribes in the sample received a total of 754 GAP grants between 1994 and 2004. The funding amounts awarded for these grants ranged from \$1,918 to \$423,000; the mean GAP award for the sample of tribes was \$102,472. These funds have supported various components of a core tribal environmental program, including salaries for environmental program staff, access to training and networking opportunities, equipment, outreach and education, and contract services. GAP funds have remained important to tribal environmental programming efforts over time, even after tribes secured additional funds from other EPA and non-EPA sources. Exhibit 3-1 illustrates the number of GAP grants received by tribes. Just over three quarters of the tribes (79 percent) received nine or fewer GAP grants during this 10-year period. The maximum number of GAP grants received by a tribe was 19; the average across tribes was seven.

Exhibit 3-1: Number of GAP Grants Received by Tribes, 1994-2004 (n=111)



After funding, tribes identified technical assistance and training as the most helpful GAP resource for developing their environmental programs. One tribe noted that access to technical assistance and training is most helpful to tribes at the beginning stages of program development. For the years 2000-2004, of the 96 tribes for which we obtained activity data related to GAP, 73 (76 percent) indicated having accessed technical resources, such as workshops or training. On average, tribes in the sample attended approximately four technical workshops or trainings during this period. Tribes also indicated that contact with regional tribal staff, as well as networking opportunities with other tribes, EPA media program offices, and non-EPA agencies and organizations, are valuable resources afforded by GAP. Regional tribal office staff facilitate access to technical assistance by linking tribes with entities that offer needed expertise. Tribes use GAP funds to pay for expenses associated with attending training, conferences, and meetings, such as those of the National Tribal Operations Committee (NTOC) and Regional Tribal Operations Committees (RTOC). According to regional POs, tribes have sought technical assistance in the following areas: drinking water, wastewater, solid waste, GIS/GPS, and, to a lesser extent, air.

Compared to technical assistance and training, a much smaller proportion of tribes accessed GAP programmatic resources from 2000 through 2004, which we narrowly defined as GAP-specific grants management or fiscal administrative training. Based on this definition, only 22 out of 96 tribes (23 percent) took advantage of a programmatic resource. These tribes accessed, on average, less than one programmatic resource during this period. The limited access to programmatic resources may be related, in part, to the longevity of tribal environmental programs funded through GAP. More established tribal programs with experienced staff may not have the same need for programmatic resources as they once did, i.e., prior to 2000. Another contributor may be the variation in the number and frequency of GAP-related training opportunities

and outreach available to tribes. Some regions hold an annual GAP conference at which GAP administrative training may or may not be provided, while other regions routinely offer GAP-specific workshops. One region indicated that it has had more success with assisting tribes with the fiscal administration of GAP on a one-on-one basis than through formal training.

B. Tribes' Use of GAP Resources

Tribes use GAP funds and technical and programmatic resources primarily to establish and maintain a tribal environmental presence in Indian country, which many tribes define as having a qualified staff person available on the reservation to respond to environmental issues of concern to their tribal council and members. In addition, tribes use GAP resources to participate in a variety of activities that help build their environmental capacity and expand their environmental presence. We examined the types of activities conducted by the 96 tribes in our sample for which we were able to obtain activity data from either the GAP database or file reviews. Exhibit 3-2 presents the percentage of tribes that participated in different categories of activities.⁵ Nearly all tribes (98 percent) participated in activities related to the general management and administration of their environmental programs. A majority of tribes also participated in land activities (84 percent), water activities (73 percent), and grant writing activities (65 percent). A smaller proportion of tribes conducted air activities and special emphasis activities.

⁵ Activities listed in the GAP database are organized into categories that correspond to six main program areas. Within each category, activities are grouped into more narrow subcategories. For example, land activities may include activities associated with asbestos, emergency response, Superfund, hazardous waste, lead, pesticides, solid waste and recycling, or underground storage tanks (UST). Activities conducted within each subcategory may be further classified by type (in Exhibit 3-3), such as general program development, staffing, communication, baseline assessment, development of monitoring capacity, development of codes, ordinances, or standards, developing permitting/licensing authority, development of QAPPs, grant administration, and database development. For a complete list of categories and subcategories, see Appendix E.

Exhibit 3-2: Activities funded by GAP, Organized by Major Category, 2000-2004 (n = 96)

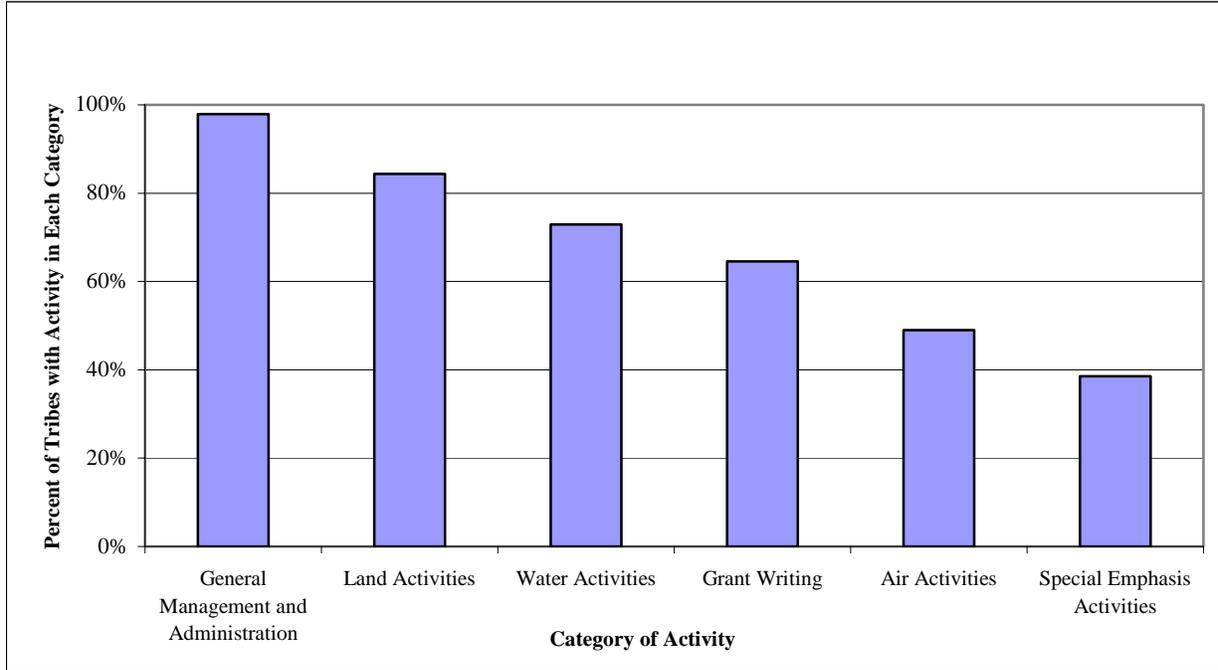
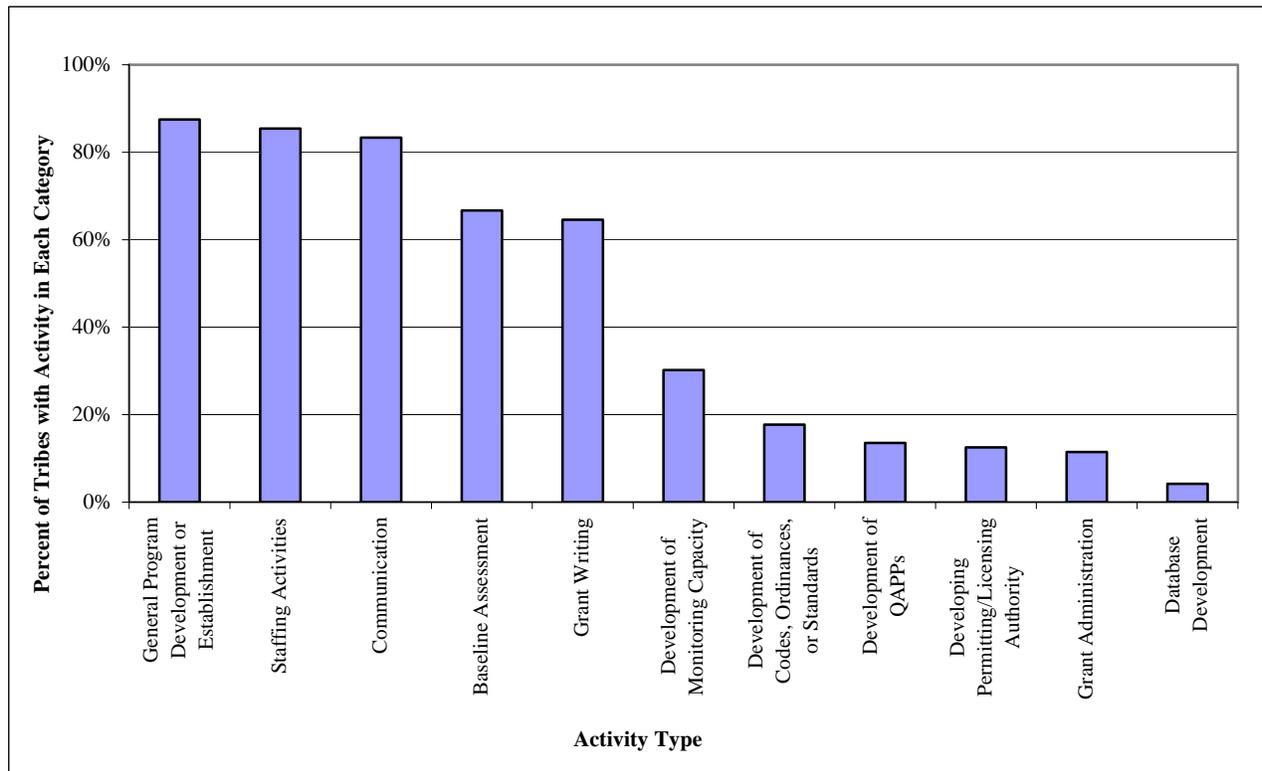


Exhibit 3-3 shows tribal participation in activities further classified by activity type. More than 80 percent of tribes participated in program development or establishment, staffing, and communication activities. Approximately two-thirds of tribes engaged in baseline assessment and grant writing activities. Considerably fewer tribes conducted activities associated with media-specific programs, such as the development of Quality Assurance Project Plans (QAPPs) and monitoring capacity; the development of legal tools such as codes, ordinances, standards, and permitting authority; and the administration of grants received in support of these programs. Only two tribes participated in database development activities.

Exhibit 3-3: Activities funded by GAP, Organized by Activity Type, 2000-2004 (n = 96)



We also asked tribes directly for details about the activities they conduct with GAP funding. The activities tribes mentioned are consistent with the categories and activity types described above, although many also reflect the specific interests and environmental priorities of individual tribes. For example, one tribe performed an assessment of medicinal plant species on the reservation. Another has conducted environmental education integrated with tribal culture and language. Noting the subsistence diet of its members, another tribe used GAP funds to address water quality and increased mortality rates potentially linked to the consumption of contaminated fish. A number of tribes have also used GAP to participate in training and planning activities for emergency response programs that include natural disaster assistance, such as forest fire prevention.

The range of activities conducted by tribes suggests both the depth and breadth of capacity-building within and across program areas. One example is water quality programs. Tribes recalled using GAP funds for wetlands surveys, riparian zone protection activities, surface water and well monitoring, and obtaining staff certifications for drinking water and wastewater treatment systems. A few tribes mentioned using GAP to hire contractors to conduct specialized activities including hazardous waste cleanups, water sampling and analysis, program planning for solid waste and emergency management, and electronics recycling.

Under the general program management and administration category, tribes have engaged in activities to further establish their legal and enforcement capability. These activities include the

development of ordinances for solid waste and recycling, open burning, zoning, and underground storage tanks, as well as the establishment of water quality standards. GAP has enabled at least one tribe to issue wetlands permits and conduct its own inspections to ensure compliance with tribal regulations. For tribes that do not have permitting or enforcement authority for programs such as UST, Underground Injection Control (UIC), or the National Permit Discharge Elimination System (NPDES), GAP provides funds for tribal environmental staff to accompany federal inspectors and gain knowledge and expertise.

C. Expectations for Grants Management, Execution of Administrative Functions, and Carrying Out Proposed Activities

The award of GAP grants brings with it EPA's expectation that tribes will fulfill the requirements of GAP for demonstrating accountability in the utilization of funds as well as for grants management and performance reporting, detailed in the 2000 GAP Guidelines.⁶ The Guidelines also specify requirements for the preparation of work plans, financial reports, and performance reports that demonstrate progress toward the achievement of deliverables stated in the grant work plans.

Based on our interviews with regional POs, we found that, overall, tribes are meeting regional expectations for grants management, the execution of administrative functions, and carrying out proposed activities. When asked to rate tribal fulfillment of regional expectations along a five-point Leichart scale, POs said that tribes *almost always* or *often* meet their region's expectations for grants management and the execution of administrative functions, and *almost always* complete the activities proposed in their work plans. According to POs, tribes continue to improve the timeliness of their GAP work plans and progress reports. Currently, most tribes in a majority of regions are submitting their work plans and progress reports on time. In one region, however, only 20 percent of tribes are submitting timely work plans and progress reports. POs attribute significant improvements in the timeliness of tribal submittals in part to efforts undertaken by regional staff to improve their ability to track submittals and to raise tribes' understanding of reporting expectations. They also acknowledge that timeliness tends to improve as tribes gain experience preparing work plans and progress reports, although setbacks can occur when there is high turnover among tribal environmental directors. Delays in work plan submittal may also occur when EPA does not announce award amounts until late in the year. Because GAP has traditionally received its appropriation toward the end of the second quarter, the time period tribes have for preparing and submitting work plans is often extended. One region addressed this problem by establishing a timetable for tribes that specifies when their work plans would be due and when regional staff would respond to them. This region emphasized to tribes that their GAP awards could be jeopardized if they did not submit their work plan by the deadline.

The quality and completeness of GAP work plans and progress reports has improved concurrently with submission timeliness. POs indicated that while most tribes submit quality work plans initially, regions must still enter into subsequent negotiations with some tribes to improve both the quality and completeness of their work plans. One PO said that only 10 percent of the tribes in the region submit initial work plans of sufficient quality; however,

⁶ Available online at www.epa.gov/indian/pdfs/gap2000.pdf. Last accessed May 2007.

approximately 90 percent show quality improvements in subsequent submittals. In addition, work plans and progress reports may fulfill the basic criteria for completeness but still lack adequate detail. Work plan and report templates have contributed to this problem in one region. A few POs view the use of the standard work plan format recently implemented nationally by EPA as having positively influenced quality, but others report that the new format has caused some declines in quality due to the need for time to become familiar with the new format, as well as tribal concern over changing expectations. Negotiations conducted with tribes during the development of earlier standard formats in two regions have facilitated tribal acceptance of the new formats, and have helped ease the transition to using them. As with timeliness, the quality and completeness of work plans and progress reports has continued to improve with the increased experience and stability of tribal environmental staff.

To further assess tribal execution of administrative functions, we examined the length of time tribes took to close out their GAP grants after the date the grants ended. Our assumption, based on prior interviews with EPA staff, is that tribes that close out their GAP grants relatively quickly after the end of the grant period have fewer administrative requirements to address at the end of the grant, and demonstrate greater capability to execute administrative functions. Of the 754 GAP grants awarded to the 111 tribes in our sample from 1994 through 2004, EPA's GICS database indicates that tribes closed out 175 grants (23 percent) during this period. The amount of time that passed between the end date and final closeout date for each grant ranged from approximately minus 3 months (i.e., the grant was closed out prior to the grant's end date) to 51 months. On average, it took tribes about a year (13 months) to close out their GAP grants.

We also examined the results of A-133 audits conducted for the 111 tribes in the sample to assess tribes' ability to execute administrative functions.⁷ As illustrated in Exhibit 3-4, approximately 25 percent of the 111 tribes in our sample had been audited during the period 1997-2004. Of these 27 tribes, the audits for 24 resulted in at least one reportable condition, material weakness, or material noncompliance outcome.⁸ Exhibit 3-5 presents the proportion of tribes with any of these three major audit findings organized by region. The greatest number of tribes audited was in Region 10, followed by Regions 9, 8, and 6. Audits that resulted in a Reportable Condition also resulted in a Material Weakness. All the tribes audited in Regions 7, 8, and 9 had audit findings in these categories. Fewer tribes had audits that resulted in Material Non-Compliance. Note that because participation in an A-133 audit is required only when a tribe's total annual expenditures of federal funds exceed a high threshold, most of the tribes in our sample would not likely have to undergo such an audit. As a result, the tribes in our sample that were audited and cited with a reportable condition, material weakness, or a material non-compliance may not be representative of the ability of the tribes not audited to execute administrative functions pertaining to GAP grants. It may also be the case that since A-133

⁷ In accordance with Office of Management and Budget (OMB) Circular No. A-133 (68 FR 38401), non-federal entities that expended \$300,000 (or \$500,000 for fiscal years ending after December 31, 2003) or more in a year of federal awards, such as grants, are required to have a single or program-specific audit conducted on an annual basis. Available from: <http://www.whitehouse.gov/omb/circulars/a133/a133.html>. Accessed April 2007.

⁸ Reportable conditions, as defined in the OMB Circular No. A-133 (68 FR 38401), constitute deficiencies in internal control over major programs. Reportable conditions may be individually or cumulatively material weaknesses. Material noncompliance means noncompliance with the "provisions of laws, regulations, contracts, or grant agreements related to a major program."

audits include a review of all federal expenditures for a tribe, the findings recorded in the Audit Database for tribes in our sample may not be related to tribal fiscal performance under GAP.

Exhibit 3-4: A-133 Audit Findings, 1997-2004 (n = 111)

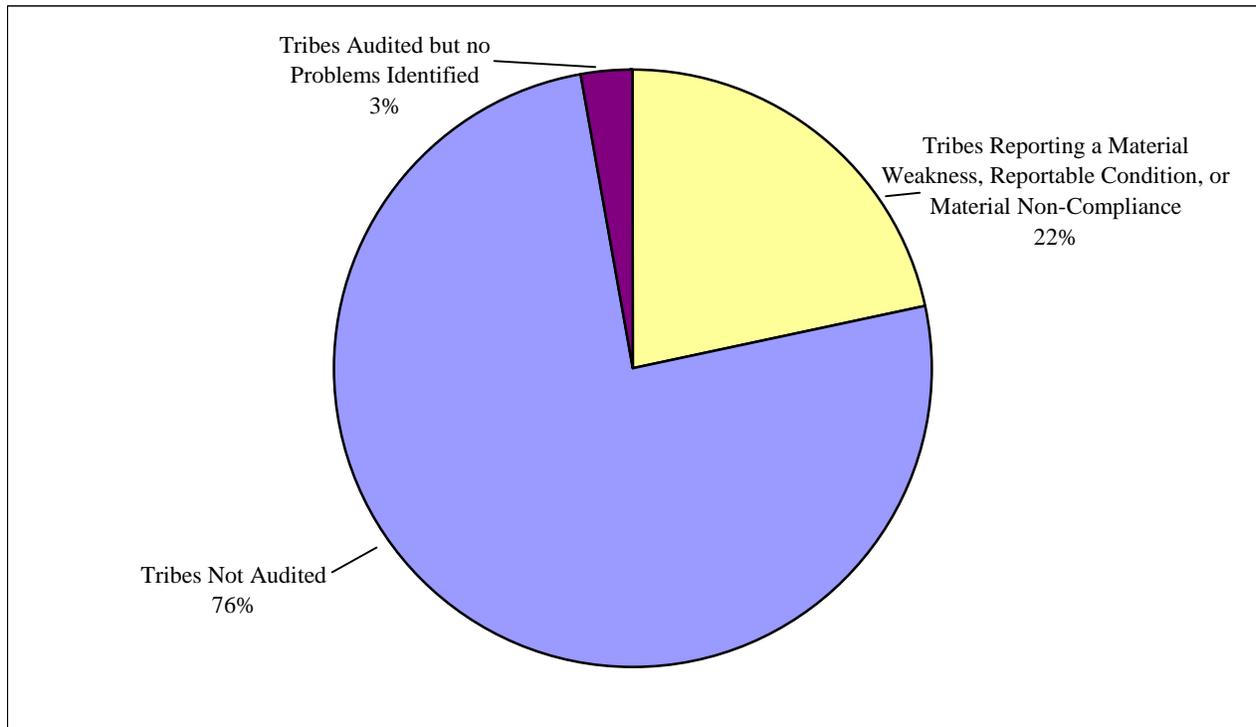


Exhibit 3-5: A-133 Audit Findings by Region, 1997-2004 (n = 111)

EPA Region	Number of Tribes in Sample	Percent of Tribes in the Sample that were Audited	Percent of Tribes Audited with a Reportable Condition	Percent of Tribes Audited with a Material Weakness	Percent of Tribes Audited with a Material Non-compliance	Percent of Tribes Audited with no problems reported
1	2	0%	-	-	-	-
2	1	0%	-	-	-	-
4	1	0%	-	-	-	-
5	7	29%	50%	50%	50%	50%
6	14	29%	75%	75%	50%	0%
7	2	50%	100%	100%	0%	0%
8	6	83%	100%	100%	60%	0%
9	30	20%	100%	100%	50%	0%
10	48	19%	78%	78%	33%	22%

Regional POs identified only a few tribes that had received a major finding on an A133 audit. POs said these audit findings mainly cited problems with tribes' practices in tracking and documenting expenditures, such as incomplete time and attendance records for environmental staff on the GAP payroll. In addition, audits revealed some concerns about tribes' ability to track the non-Federal share of their funding and the use of GAP funds when those funds were combined with other grants (e.g., when GAP funds and other grants were pooled to purchase equipment). At the regional level, the grants administration office often assumes responsibility for reviewing tribes' management of GAP grants while POs focus their reviews of grantee progress on activities funded by GAP. For regional on-site GAP grant management reviews, POs report that a majority of tribes receive positive reviews, but in the small number of instances where problems are identified, the regions work directly with the tribes to correct them. In one region where GAP grants are incorporated into tribal PPGs, all regional program staff involved in the PPG, including senior managers, participate in the reviews and the development of follow-up action items with the tribes.

D. How Participation in GAP Influences Understanding of the Process Required to Develop a Tribal Environmental Program

In addition to assessing the direct resource outputs provided by GAP, the evaluation seeks to discern how tribal participation in GAP and utilization of GAP resources has influenced, 1) tribes' understanding of the process required to develop an environmental program, and, 2) the way tribes approach the various administrative and programmatic functions associated with the development process. Tribal representatives emphasize that instead of changing tribal understanding of how to develop an environmental program, GAP facilitates tribes' ability to develop a program that is responsive to each tribe's unique environmental conditions and priorities. GAP resources enable tribes to establish an environmental presence, which in turn provides the foundation upon which each tribe can build an environmental program tailored to meet its needs. From EPA's perspective, however, GAP may influence and clarify tribal priorities as tribal environmental staff acquire training, learn about specific environmental conditions on tribal lands, and become more aware of concrete program opportunities through their interactions with EPA regional tribal and media program contacts.

Although tribes' maintain the view that GAP has not directly changed their environmental priorities or their understanding of what is needed to achieve them, they acknowledge that on a practical level, GAP has helped them develop a planning perspective, specifically, establishing and refining the annual goals in their work plans to support their priorities. One tribe noted that the progress made toward the goals outlined in its GAP work plan in a given year influences the priorities it establishes for the next year. As another tribe observed, however, the goals EPA establishes for GAP in a given year might target an emerging EPA priority, such as children's health, which may not correspond with tribal environmental priorities.⁹ Under these circumstances, tribes may enter into negotiations with EPA to resolve differences but end up modifying their approach to align with the GAP goals in order to secure needed funding.

⁹ The divergence between tribal and EPA goals may be more of an issue for tribes seeking media-specific funds from EPA, rather than GAP funding, since GAP funds may be used to address tribal priorities.

With regard to the influence of GAP on the administration of tribal environmental programs, tribes stress that the continuity of GAP funding provides them with the means to hire, train, and keep qualified, environmental professionals. Retaining a qualified, knowledgeable staff person allows tribes to effectively manage their GAP funds, carry out activities proposed in their work plans, and seek opportunities to further expand and diversify their environmental programming in response to tribal priorities. GAP facilitates tribes' awareness of the broader environmental resources and infrastructure available to assist them. Through contact with GAP POs and other personnel in each region's tribal office, tribal environmental staff learn about the media-specific programs within EPA and external to EPA that can provide funding and technical assistance to complement GAP activities.

GAP also facilitates the creation of partnerships among tribes, and between tribes, and outside agencies and organizations, that can give tribes a voice in addressing environmental concerns on and off the reservation. Most tribal representatives assert that in addition to promoting external communication, GAP has influenced how tribes communicate internally to tribal members and council about environmental concerns. Tribes use GAP funds to develop environmental and cultural education programs for tribal youth and prepare outreach materials, such as monthly newsletters and radio announcements. The education and outreach conducted by tribal environmental staff helps to build community recognition for environmental activities on the reservation and raises the credibility of the tribal environmental program and its accomplishments. For example, one tribal representative mentioned that GAP assistance helped the tribe gain recognition in the community for its environmental leadership. The environmental director and staff formed committees to raise awareness among tribal members and involve them in establishing environmental priorities on the reservation.

III. INDICATORS OF TRIBAL ENVIRONMENTAL CAPACITY

An important objective of the evaluation is to determine how effective GAP has been in building tribal environmental capacity among tribes receiving GAP funds. For the purpose of this evaluation, we are using a definition based on EPA's 2000 GAP Guidelines: "environmental capacity" means that a tribe has established the administrative, legal, technical, and enforcement capability necessary to develop and implement a tribal environmental program, as well as the communications capability to work with federal, state, local, tribal, and other environmental officials. This section attempts to answer this question in detail by: 1) identifying the indicators of environmental capacity, as defined by GAP, tribes, and regional POs; 2) assessing the extent to which tribes have "achieved" environmental capacity given the presence of these indicators; 3) identifying other factors that may influence the development of tribal environmental programs; and 4) determining how GAP has contributed to tribal environmental capacity relative to these other factors.

A. Tribal and Regional Perspectives on Indicators of Environmental Capacity

Notwithstanding the GAP definition of environmental capacity and the five indicators incorporated within, we asked tribal representatives and regional POs to provide their perspective on what it means for a tribe to have attained environmental capacity. Tribes tend to define environmental capacity more generally than GAP and equate it with a variety of key

indicators, as shown in Exhibit 3-6. Many of the tribal definitions of capacity and indicators fall within the GAP category of technical capability, e.g., the hiring and training of qualified environmental professionals and the expansion of tribal environmental programming efforts to include media-specific components. A few tribes linked environmental capacity with legal or enforcement capability. One tribal representative equated environmental capacity with three broad indicators: 1) the ability of tribes to recognize environmental problems, 2) the ability of tribes to address the problem and take immediate action to protect health and the environment, and, 3) the ability (i.e., knowledge and capability) of tribes to prevent the problem from happening again. By that person’s estimation, 90 percent of tribes have met the first indicator, 35-50 percent have met the second, and only 10 percent have met the third.

Exhibit 3-6: Tribal Definitions of Environmental Capacity and Key Indicators	
Definitions	Key Indicators
<ul style="list-style-type: none"> • Having an environmental presence - the ability to respond quickly to environmental issues and implement environmental initiatives in response to tribal concerns as they arise. • The ability to attract, hire, train, and sustain qualified environmental staff to regulate tribal environmental programs across all media areas. • The ability to build tribal awareness and understanding of environmental conditions on tribal lands. • The ability to carry out environmental protection via the development of codes and ordinances. • The ability to enforce environmental permits and conduct compliance actions on reservation lands. 	<ul style="list-style-type: none"> • Progression over time from a single multi-media program with one staff person to multiple program areas with support staff. • Trained staff and growth of programs with media grants. • The degree of institutionalization of environmental programs and the reliance of the tribe on the technical expertise of its environmental director and staff. • A functioning environmental program with all five individual components – administrative, legal, technical, enforcement, and communications. • Establishing a water quality system and standards, receiving Treatment As a State (TAS), and being able to run the program efficiently for the betterment of the tribe. • Convergence of the tribe’s environmental program with its economic development strategy. • Protection of tribes’ sovereign right to protect water, land, air.

Regional POs identified many of the same key indicators of capacity as tribes, such as tribes’ ability to establish an environmental presence; retain qualified, knowledgeable staff over the long-term; and diversify their environmental programming. These POs see the longevity and expertise of staff as the primary means by which tribes achieve success. Seasoned staff are adept at finding solutions to environmental problems, they participate more fully in regional networking opportunities (e.g., RTOC calls), they provide mentoring to other tribes, and they are likely to have comprehensive programs funded by multiple grants. POs also pointed to the development of legal and enforcement capability as an important indicator; one PO acknowledged, however, that while many tribes have developed codes and ordinances, few have the capability to enforce them. Another PO cited direct positive results, such as when a tribe’s efforts lead to a demonstrable change in behavior or environmental outcomes for tribal members, as an important indicator.

B. The Extent to Which Tribes Have Achieved Environmental Capacity

In order to determine the extent to which tribes in our sample have achieved environmental capacity as defined by GAP, we examined tribal capability in each of the five indicator areas - technical, legal, enforcement, administrative, and communication. We identified a set of coded activity types for each indicator and equated tribal capability in that area with a tribe's participation in one or more related activity. Exhibit 3-7 lists the activity types selected to demonstrate tribal capability for each indicator and the proportion of the 96 tribes that participated in activities within each type during 2000-2004. For legal capability, we identified three activity types: activities to increase legal capability and the development and/or adoption of codes, ordinances, and standards.¹⁰ For enforcement and administrative capability, we identified only one activity type for each: activities to increase enforcement capability and activities to increase fiscal administrative capability, respectively.¹¹ For technical capability we identified four activity types: the hiring of a professional employee, and participation in water, waste, or air activities.¹² For communications capability we identified three activity categories: general, internal, and external communication activities.

Exhibit 3-7: Tribal Achievement of Environmental Capacity, 2000-2004 (n = 96)			
Type of Tribal Capacity	Indicator of Environmental Capacity	Number of Tribes	Percent of Tribes
Legal	Developed a Code, Ordinance, or Standard	25	26%
	Participated in an Activity to Increase Legal Capacity	24	25%
	Adopted a Code, Ordinance, or Standard	7	7%
Enforcement	Participated in an Activity to Increase Enforcement Capacity	25	26%
Technical	Hired a Professional Employee	86	90%
	Participated in Water Activities	70	73%
	Participated in Waste Activities	70	73%
	Participated in Air Activities	47	49%
Administrative	Participated in an Activity to Increase Fiscal Administration Capacity	15	16%
Communications	Participated in Internal Communication Activities	68	71%
	Participated in External Communication Activities	66	69%
	Participated in General Communication Activities	28	29%

¹⁰ The development of codes, ordinances, and standards includes the development of permitting/licensing authority and water quality standards.

¹¹ Enforcement activities include all activity descriptions containing the keywords “enforce” or “inspect.” Activities to increase fiscal administration capability comprise activities related to the development of standards for property management, procurement, and general fiscal administration.

¹² Water activities include ground water, non-point source, point source, source water protection, UIC, watershed, and wetlands. Waste activities include hazardous waste, recycling, and solid waste. Air activities include external and indoor air.

Exhibit 3-8 presents the number and percent of tribes that achieved at least one indicator for each category of environmental capacity during the period 2000-2004. For example, in Region 1, one of the two tribes in the region achieved at least one indicator of technical capacity, while in Regions 10, 33 of the 34 tribes in the region achieved at least one indicator of technical capacity. This exhibit shows that, overall, the vast majority tribes have achieved at least one measure of capacity in the areas of technical and communications capability. Approximately one-third of tribes have achieved at least one measure of legal capability, while fewer tribes have achieved enforcement and administrative capacity.

Exhibit 3-9 shows the number and proportion of tribes that demonstrated capability in multiple categories of capacity during the same time period. For example, in Region 1, one of the two tribes did not demonstrate capability in any of the indicator categories (legal, enforcement, technical, administrative, or communications capability). The second tribe in the region demonstrated capability in only one of these categories. Forty-four percent of tribes demonstrated capability in two categories of capacity, 24 percent demonstrated capability in three categories, and 21 percent demonstrated capability in four categories of capacity.

Exhibit 3-8: Number and Percent of Tribes that Achieved at Least One Indicator for Each Category of Environmental Capacity, by Region, 2000-2004 (n = 96)

Region	No. Tribes in Sample with Data	Legal		Enforcement		Technical		Administrative		Communications	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	0	0%	0	0%	1	50%	0	0%	0	0%
2	1	0	0%	1	100%	1	100%	0	0%	1	100%
4	1	1	100%	1	100%	1	100%	0	0%	1	100%
5	7	2	29%	4	57%	7	100%	0	0%	4	57%
6	14	2	14%	3	21%	14	100%	0	0%	10	71%
7	2	0	0%	0	0%	2	100%	1	50%	1	50%
8	6	2	33%	2	33%	6	100%	1	17%	4	67%
9	29	12	41%	10	35%	29	100%	9	31%	27	93%
10	34	14	41%	4	11%	33	97%	4	12%	32	94%
Total	96	33	34%	25	26%	94	98%	15	16%	80	83%

Exhibit 3-9: Number of Categories of Environmental Capacity for which Tribes Achieved at Least One Indicator, by Region, 2000-2004 (n = 96)

Region	No. Tribes in Region with Data	Zero		One		Two		Three		Four		Five	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	1	50%	1	50%	0	0%	0	0%	0	0%	0	0%
2	1	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
4	1	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
5	7	0	0%	0	0%	4	57%	3	43%	0	0%	0	0%
6	14	0	0%	2	14%	10	71%	1	7%	1	7%	0	0%
7	2	0	0%	1	50%	0	0%	1	50%	0	0%	0	0%
8	6	0	0%	1	17%	3	50%	0	0%	2	33%	0	0%
9	29	0	0%	1	3%	9	31%	8	28%	11	38%	0	0%
10	34	0	0%	3	9%	16	47%	9	27%	5	15%	1	3%
Total	96	1	1%	9	9%	42	44%	23	24%	20	21%	1	1%

Technical Capability

Ninety-eight percent of the 96 tribes in our sample participated in activity types associated with technical capability. Within this indicator category, 90 percent of the 66 tribes for which we had GAP position data hired at least one professional or technical employee with GAP funding. Exhibit 3-10 presents the number of professional and technical full-time equivalent (FTE) staff supported by GAP. Tribes hired more professional staff (an average of 0.8 FTEs), which included environmental program directors or managers, than technical staff (an average of 0.4 FTEs). These results suggest that tribes depend primarily on GAP funding to hire full-time environmental directors and managers but may rely on GAP in combination with other funding sources to hire technical personnel for specific programs or to perform discrete tasks.

Exhibit 3-10: Number of Full Time Equivalent Positions (FTEs) funded by GAP, 2000-2004 (n = 66)		
Category	Total FTEs provided by GAP	FTEs per Tribe
Professional	53.4	0.8
Technical	27.7	0.4
Total Professional and Technical FTEs	81.2	1.2

To assess the scope of tribal technical capability supported by GAP, we examined tribes' participation in activities in three media-specific program areas. As shown in Exhibit 3-11, nearly three-quarters (73 percent) of the 96 tribes participated in either a water or waste activity. Approximately half participated in an air activity. Exhibit 3-12 displays the number and proportion of tribes in each region that participated in these media-specific areas. Regions 2, 5, 6, 8, 9 and 10 had tribes that participated in activities in all three media areas; Regions 2 and 5 had the highest rates of tribal participation across the three areas. The rates of tribal participation in Regions 1, 2, 4, and 7 may be a function of the small number of tribes included in the sample for each region.

Exhibit 3-11: Number and Percent of Tribes with Media-Specific Activities, 2000-2004 (n = 96)		
Media Area	Number of Tribes	Percent of Tribes
Water	70	73%
Waste	70	73%
Air	47	49%

Exhibit 3-12: Number and Percent of Tribes Participating in Activities in Each Media Area, by Region, 2000-2004 (n = 96)							
Region	Number of Tribes with Activity Information	Water Activities		Waste Activities		Air Activities	
		Number	Percent	Number	Percent	Number	Percent
1	2	1	50%	0	0%	1	50%
2	1	1	100%	1	100%	1	100%
4	1	1	100%	0	0%	0	0%
5	7	6	86%	7	100%	6	86%
6	14	10	71%	8	57%	7	50%
7	2	2	100%	0	0%	1	50%
8	6	6	100%	4	67%	4	67%
9	29	21	72%	22	76%	12	41%
10	34	22	65%	28	82%	15	44%

Tribes engage in many activities specific to the media program areas, although there appears to be a greater diversity of activities in the water and waste categories than in the air activity category. Exhibit 3-13 lists examples of the kinds of activities conducted in each area, as described by tribal representatives.

Exhibit 3-13: Examples of Media-Specific Program Activities Conducted by Tribes with GAP Funding		
Water Activities	Waste Activities	Air Activities
<ul style="list-style-type: none"> • Water quality planning • Development of water quality standards • Surface water monitoring • Well monitoring and compliance • Water sample analysis • Riparian zone protection • Sewage treatment permitting • Wetlands – survey, permitting • Mercury testing in fish • Certification of staff • QA/QC for macroinvertebrate identification 	<ul style="list-style-type: none"> • Development of solid waste, recycling, and burn barrel ordinances • Solid waste – open dump cleanup; waste inventory • Recycling – electronics, motor oil • School chemical cleanup • Hazardous spill cleanup 	<ul style="list-style-type: none"> • Indoor air quality monitoring

Communications Capability

Eighty-three percent of tribes in our sample participated in one or more activity types associated with communication capability (Exhibit 3-9). As shown in Exhibit 3-8, 71 percent of tribes participated in internal communication activities, (e.g., with the tribal council, tribal members, schools, and other tribal offices). A nearly equal proportion, 69 percent, participated in external communication activities (e.g. with other tribes, EPA, other Federal and non-federal agencies, and non-governmental organizations). Only about 30 percent of tribes reported participating in general communication activities that could not be specified as either internal or external communication. Regions 1, 4, 9, and 10 had the highest rates of tribal participation in activities

associated with communications capability. Neither tribe in our sample from Region 1 participated in these types of activities. As discussed in Section II.D., GAP supports a range of internal and external communications activities, from developing partnerships with federal agencies to preparing outreach materials for tribal youth.

Legal and Enforcement Capability

Approximately a third of tribes (34 percent) in our sample met at least one indicator of legal capability (see Exhibit 3-8). While approximately a quarter of tribes participated in general activities to increase legal capacity or developed a code, ordinance, or standard, far fewer (7 percent) actually adopted a code, ordinance, or standard (see Exhibit 3-7). Regions 4, 9, and 10 had the highest proportion of tribes in our sample that demonstrated legal capability. Regions 1, 2, and 7 had no tribes that demonstrated this capability. That fewer tribes in our sample had demonstrated legal capability compared to other indicators runs counter to the experience of tribal representatives who participated in the panel discussions. Many tribes said they had developed codes and ordinances for solid waste and water quality, among other programs, with assistance from GAP. The difference may be a function of the limited time period, 2000-2004, for which data were available on tribal activities. Depending on when tribes in the sample first received GAP funding, they may have conducted activities related to legal capability, particularly the development of tribal codes and standards, either prior to the start or after the conclusion of this period. Tribes may have also participated in legal activities, including code and standards development with support provided from non-GAP funding sources. According to one tribal representative, the tribe provides its own legal staff to assist the environmental program with its legal activities.

Fewer tribes in our sample demonstrated enforcement capability than legal capability. As shown in Exhibit 3-7, just over a quarter of tribes participated in inspections or other enforcement-related activities. Regions 2, 4, and 5 had the highest proportion of tribes that participated in these activities. No tribes in Regions 1 or 7 participated in activities associated with the development of enforcement capability from 2000-2004. Section II.B. describes some of enforcement activities conducted by tribes with support from GAP. Tribal enforcement capability may be a function of tribes' ability to develop and adopt their own codes, ordinances, and standards. While the proportion of tribes shown to have demonstrated enforcement capability is consistent with the assessments of POs, it is possible that tribes may have conducted enforcement activities or inspections outside the period for which GAP activity data were available or may have funded these activities with non-GAP support.

Administrative Capability

Only 16 percent of tribes in our sample participated in activities related to administrative capability (Exhibit 3-8). Fewer tribes have demonstrated capability in the administrative area than any other indicator. As mentioned above, for the purposes of this analysis we defined administrative capacity as tribal participation in activities related only to fiscal administrative capability, including the development of procurement and property management standards. Our narrow focus on fiscal administrative capability likely omitted tribal participation in other administrative activities, such as grants administration, which tribes may have conducted as a component of their media-specific programs. The observations of the regional POs discussed in

Section II.C. regarding the extent to which tribes are meeting expectations for grants management and execution of administrative functions suggest that contrary to this finding, tribes have increased their administrative capability over time.

C. Factors that Contribute to the Achievement of Environmental Capacity

In addition to requesting tribal and regional input on the most important indicators of tribal environmental capacity, we asked tribes and POs to identify factors that impact environmental capacity and describe how they influence tribal efforts. We found considerable overlap between the key indicators of capacity identified by tribes and POs and the factors they cited, which influence capacity. For example, the ability of a tribe to hire and retain knowledgeable environmental staff is considered to be both a factor influencing capacity and an indicator of tribal environmental capacity. In other words, tribes need committed, trained professionals to develop their environmental programs, and tribes with established environmental programs are more likely to have a stable, qualified staff.

We presented POs with a list of potential factors and asked them to rank each on a Liechart scale according to the degree to which it influences the ability of tribes in their respective regions to attain environmental capacity. Exhibit 3-14 lists the factors that a majority of POs identified as more (*almost always* or *often*) and less (*sometimes*, *seldom*, or *almost never*) influential. The rankings suggest that the tribal council's relationship with a tribe's environmental program and its director, demonstrated by the level of support and clarity of direction it provides, significantly impacts a tribe's ability to attain environmental capacity. POs reported that stable funding is the most critical factor affecting the longevity of tribal environmental staff, but emphasized that the actions of tribal council can also lead to staff turnover when there is a lack of communication between a tribe's environmental director and council members, or when tribal elections result in a change in leadership. The frequent departure or replacement of trained tribal environmental staff can deprive tribes of the institutional expertise needed to sustain continuity and grow their environmental programs. Staff turnover can also diminish other factors that build capacity, such as information sharing among tribes, communication with EPA, and access to non-GAP funding. Historically, POs report that the term of employment for a tribal environmental director has varied across tribes, ranging from a low of <1 year to a high of 20 years, with an average of approximately 2 to 10 years, depending on the region.

Another potential measure of a tribal council's support for the tribe's environmental program is its commitment of tribal funding. According to one PO, a tribe's willingness to support the environmental program with its own money means the tribe values the program enough to help it succeed. For example, a tribe in the region conducted extensive community outreach among tribal members to obtain their ideas for a creek restoration project. The tribal council's investment of discretionary funds, in addition to their official endorsement, was critical in providing the environmental program with the means to sustain community participation in its planning and restoration efforts.

Exhibit 3-14: Factors that Project Officers Said Influence Tribal Environmental Capacity (in descending order of importance)
<p>More Influential (<i>Almost Always or Often</i>):</p> <ul style="list-style-type: none"> • Tribal council support for environmental programs • Qualifications of tribal environmental director and/or staff • Turnover rate of tribal environmental director and/or staff • Clear tribal environmental priorities • Degree of information sharing among tribes • Access to funding outside of GAP • Experience, knowledge, and longevity of EPA POs • Rate of change in tribal government leadership (e.g., council members) • Frequency with which tribes request information from EPA
<p>Less Influential (<i>Sometimes, Seldom, or Almost Never</i>):</p> <ul style="list-style-type: none"> • Year-to-year shifts in funding priorities due to changing priorities at EPA • Cohesiveness of a tribe's land base • Planning documents prepared by tribes (e.g., five year plans) • Extent to which the regions consult with tribes • Changes in the GAP funding process • Different perceptions about funding priorities between tribes and EPA • Status of tribal office in region (e.g., its location in the organizational chart)

The factors tribal representatives consider most influential correspond with many of the factors that POs identified as affecting tribes' ability to build capacity, including the stability of knowledgeable tribal environmental staff, effective communication between tribes and EPA regions, and the support of tribal council for planning and funding environmental programs relative to other tribal priorities (e.g., healthcare and economic development). Tribes also identified factors related to EPA's activities that influence tribes' environmental capacity, including the need of EPA regional tribal office staff to clearly convey their expectations for GAP, provide timely responses to grant applications and requests for assistance, and be proactive in consulting with other EPA media programs. Additional factors mentioned by tribes that influence capacity include the existing tribal infrastructure and history of successful implementation of tribal programs, jurisdictional issues, and the length of time a tribe has been federally recognized.

Tribes stressed that consistent access to funding across a range of media areas is critical to their ability to build environmental capacity and expand their programming to respond to tribal needs. Since GAP does not fund implementation activities and many media-specific grants are competitive, tribes cannot be assured that they will have the funds to maintain their programs from year to year. One tribe indicated that the ability of EPA to find ways to fit a broader array of tribal environmental activities within the GAP guidelines is one way to address funding consistency and help tribes attain environmental capacity. Another suggested that the Treatment as a State (TAS) designation, if tied to sustained funding such as states receive, could help ameliorate this problem.

A number of the most influential factors, such as the level and consistency of GAP funding available to sustain and train tribal environmental staff, the timely provision of technical

assistance, access to non-GAP EPA funding, and effective communication with tribes, remain within the purview of EPA. Other factors related to a tribe's internal structure and leadership, including the clarity of tribal environmental priorities, the rate of change of tribal leaders, and the support provided by tribal council for planning and funding environmental programs, are, however, generally beyond EPA's direct control. Yet, given the significant role of GAP and other EPA support in building, promoting, and sustaining tribal environmental programs, EPA may still have the ability to indirectly influence these internal tribal factors.

D. Relative Contribution of GAP Toward Achieving Environmental Capacity

As discussed above, there are many factors that can potentially affect tribes' achievement of environmental capacity such as GAP funding and technical assistance, the stability of tribal leadership and staffing, and the degree to which Tribal council members focus on environmental concerns. Another potential factor is tribal access to other sources of funding (e.g., EPA media programs, other federal and state agencies, and tribes themselves).

Interviews with tribal representatives and POs make clear that they perceive GAP funding as essential to achieving environmental capacity. Many tribes say that without GAP funding, they would be able to do very little environmental work. They stress that GAP is the foundation for their environmental programs, and GAP resources enable them to establish a basic program infrastructure, through which they can apply for other types of environmental funding. This view supports a basic premise of the GAP program, namely, that as GAP helps tribes build their environmental capacity, tribes will be able to access other sources of funding to support their environmental programs.

If this view is correct, it should be evident from the data on the types of grants tribes are accessing to support their environmental programs. We would expect tribes that had accessed GAP for a longer period of time would have built environmental capacity to a greater degree, would have more established environmental programs, and as a result would be more able to obtain greater amounts of non-GAP funding than tribes that had accessed GAP over a short time period. To test this hypothesis, we conducted an analysis of the amount of non-GAP grants receive by tribes in our sample. Note that because we only had access to data for EPA grants, this analysis does not include any non-EPA grants (such as water resources funding available through other federal agencies like the Bureau of Indian Affairs). Out of the 111 tribes in our sample, 69 (62 percent) received at least one non-GAP EPA grant. Exhibit 3-15 lists the number of non-GAP EPA grants in each category awarded to tribes in our sample (in descending order), along with the total amount of funding awarded in each category, the number of tribes in our sample that received each type of grant, the average grant amount awarded, the average cumulative amount awarded to each tribe that received a grant, and the average number of grants awarded to tribes in each category. Tribes in our sample received a total of \$89,251,881 in non-GAP EPA grant funding from 1994-2004. They most often received grants in the general water, multimedia, and air categories. On average, individual tribes received the most total funding from general water, water point-source, and multimedia grants. Appendix J lists examples of the non-GAP EPA programs and other federal agencies identified by tribes that provided funding and/or technical support.

**Exhibit 3-15: Number and Dollar Amount of Non-GAP EPA Grants Awarded to Tribes,
by Grant Category, 1994-2004 (n=111)***

Category	Subcategory	Number of Grants	Total Funding Awarded	Number of Tribes with Grant	Average Grant Amount	Average Total Amount Awarded per Tribe	Average Number of Grants per Tribe
Water		386	\$28,349,377	56	\$73,444	\$506,239	6.9
Multimedia		198	\$15,856,844	41	\$80,085	\$386,753	4.8
Air		93	\$8,559,419	24	\$92,037	\$356,642	3.9
Land	Pesticides	93	\$3,217,600	16	\$34,598	\$201,100	5.8
Land	Superfund	59	\$4,824,484	19	\$81,771	\$253,920	3.1
Water	Wetlands	57	\$3,773,206	29	\$66,197	\$130,110	2.0
Land	Lead	52	\$2,887,537	19	\$55,530	\$151,976	2.7
Water	NPS	52	\$3,648,428	13	\$70,162	\$280,648	4.0
Land	Solid Waste	43	\$1,237,792	20	\$28,786	\$61,890	2.2
Air	IAQ	41	\$1,968,785	13	\$48,019	\$151,445	3.2
Water	Source water protection	36	\$5,998,683	16	\$166,630	\$374,918	2.3
Other	Education	28	\$1,496,762	16	\$53,456	\$93,548	1.8
Special Emphasis	Environmental Justice	26	\$737,370	19	\$28,360	\$38,809	1.4
Land	UST	24	\$1,132,701	8	\$47,196	\$141,588	3.0
Other		23	\$1,283,880	10	\$55,821	\$128,388	2.3
Land	Brownfields	7	\$1,360,939	6	\$194,420	\$226,823	1.2
Water	Point Source	7	\$2,271,025	5	\$324,432	\$454,205	1.4
Land	Emergency Response	6	\$145,975	6	\$24,329	\$24,329	1.0
Special Emphasis	Pollution Prevention	6	\$207,889	4	\$34,648	\$51,972	1.5
Land	Hazardous Waste	4	\$243,185	2	\$60,796	\$121,592	2.0
Land	Persistent Organic Pollutants	1	\$50,000	1	\$50,000	\$50,000	1.0

*Funding amounts are rounded to the nearest whole dollar.

We then analyzed the sequence of GAP and non-GAP EPA funding between 1994 and 2004 for the 111 tribes in the sample. Based on our hypothesis, we anticipated that tribes would access GAP funds first, followed by non-GAP funds. We found, however, that GAP funds tend to be accessed year after year, and therefore, a majority of tribes in our sample (90 percent), received non-GAP EPA funds concurrently with GAP funding. For the remaining tribes that did not receive non-GAP EPA funds concurrently with GAP funds, about four percent them received GAP funding first, while about seven percent received non-GAP EPA funding first.¹³ With

¹³ These figures do not add to 100 percent because of rounding error.

regard to the sequencing of GAP and non-GAP EPA funding, one PO noted that non-GAP EPA funding was the first type of funding available to tribes. Specifically, Clean Water Act 106 funds became available in 1989, and this funding was the first grant program accessed by many tribes. Once GAP became available in 1994, GAP began to offer more money to tribes than other program funds. This may also explain, in part, why tribes have accessed significantly more water-related grants than other types of non-GAP EPA grant. Another explanation for the large number of water-related grants awarded to tribes may be the greater amount and variety of grants offered by EPA's water programs relative to other media programs.

Since our analysis of the sequence of grants was not informative for the majority of tribes that received GAP and non-GAP EPA funding concurrently, we conducted an additional analysis to compare funding patterns for tribes that received GAP early in the program's existence (from 1994 to 1999), to tribes that received GAP later (from 2000 to 2004).¹⁴ Specifically, we would expect tribes that began receiving GAP during the earlier period ("early adopters") to have accessed a greater percentage of funding from non-GAP EPA sources compared to tribes that began receiving GAP during the latter period ("late adopters"). If true, this would support the claim that as tribes receive GAP funds over time, they are able to build environmental capacity and basic program infrastructure, and then apply for and receive other EPA funds to support their programs. Note that the small number of late adopters in our sample limits the degree to which we can make inferences from this analysis, since it is possible that this sample of tribes may not be representative of the overall population of tribes that received GAP funding from 2000 to 2004.

Our comparison of early vs. late adopters of GAP shows that in fact early adopters have received a greater percentage of their funding from non-GAP EPA sources. Specifically, as presented in Exhibit 3-16, only 44 percent of early adopters' total EPA funding between 1994 and 2004 came from GAP, compared to 80 percent of GAP funding for late adopters. Moreover, there is a marked increase (1,549 percent) in the amount of non-GAP EPA funding awarded to late adopters after they received GAP, compared to before they received GAP. This supports the view that GAP is helping tribes expand their sources of environmental funding, which suggests that tribes have increased their environmental capacity accordingly.

¹⁴ Based on AIEO's suggestion, we have excluded Alaskan tribes from this analysis, because the Alaska Native Claims Settlement Act treats Alaskan tribes differently than other tribes, and they do not have access to the same funding as other tribes. When the Alaskan tribes are removed, the sample size is reduced to 70 tribes.

Exhibit 3-16: Comparison of GAP and Non-GAP EPA Grant Funding for Early vs. Late Adopting Tribes, 1994-2004 (n=70)*		
	Early Adopters (1994-1999)	Late Adopters (2000-2004)
Number of Tribes	61	9
Number of GAP Awards	563	31
Number of Non-GAP Awards	1218	12
Amount of GAP Funding	\$69,161,568	\$3,426,273
Amount of Non-GAP Funding	\$87,670,474	\$874,395
Percent of Total Funding from GAP Grants	44%	80%
Percent of Total Funding from Non-GAP Grants	56%	20%
Average Non-GAP Funding Per Tribe	\$1,437,221	\$97,155
Median Non-GAP Funding Per Tribe	\$707,896	\$40,000
Total Amount of Non-GAP Funding Received Before GAP	N/A	\$50,000
Amount of Non-GAP Funding received After GAP	N/A	\$824,395
Percent Change in Non-GAP Funding	N/A	1,549%

*The percent change in non-GAP funding is calculated only for late adopters since data were not available on early adopter receipt of non-GAP grants for the years preceding 1994.

We also compared achievement of specified indicators of environmental capacity between early vs. late adopters (Exhibit 3-17). This analysis shows that for five indicators of environmental capacity (those shown in bold in Exhibit 3-17), a greater percentage of early adopters had achieved the indicators of capacity compared to late adopters. For example, more early adopters are participating in waste and water activities, which are both indicators of technical capacity, compared to late adopters. However, for the remaining seven indicators of capacity, a greater percentage of late adopters had achieved the indicators. In some cases, this is consistent with our understanding of how GAP is intended to work. For example, more late adopters than early adopters have hired a professional employee with GAP funds. This may be because early adopters are now using other grants to fund salaries for professional employees. In general, however, the results of this analysis run counter to our hypothesis that tribes that have had GAP funding for a longer period of time would be further along in the process of developing environmental capacity, compared to tribes that had received GAP funding for a shorter period of time.

Exhibit 3-17: Comparison of Achievement of Environmental Capacity Early vs. Late Adopting Tribes, 2000-2004 (n=70)*					
Type of Tribal Capacity	Indicator of Environmental Capacity	Early Adopters (1994-1999)		Late Adopters (2000-2004)	
		Number of Tribes	Percent of Tribes (out of 57)	Number of Tribes	Percent of Tribes (out of 9)
Legal	Developed a Code, Ordinance, or Standard	12	21%	2	22%
	Participated in an Activity to Increase Legal Capacity	12	21%	0	0%
	Implemented a Code, Ordinance, or Standard	1	2%	1	11%
Enforcement	Participated in an Activity to Increase Enforcement Capacity	21	37%	2	22%
Technical	Hired a Professional Employee	47	82%	9	100%
	Participated in Water Activities	43	75%	6	67%
	Participated in Waste Activities	41	72%	3	33%
	Participated in Air Activities	29	51%	5	56%
Administrative	Participated in an Activity to Increase Fiscal Administration Capacity	7	12%	4	44%
Communications	Participated in Internal Communication Activities	38	67%	7	78%
	Participated in External Communication Activities	31	54%	8	89%
	Participated in General Communication Activities	24	42%	3	33%

IV. GAP PROCESS OUTPUTS TO ACHIEVE TRIBAL GOALS AND PRIORITIES

Many of the tribal representatives interviewed stated that a key goal for tribes is having an environmental presence on tribal land, i.e., a qualified staff person who can coordinate the tribe's environmental programs, maintain a cohesive program, and be a point of contact for members of the tribal community and neighboring communities. GAP enables tribes to establish this environmental presence by providing the funds to hire, train, and retain professional and technical environmental staff. As discussed in the previous section, GAP funds the salary of the environmental director or manager, and thus enables the coordination of all environmental program work. One tribe noted that GAP funds the salaries of environmental specialists who conduct virtually all of the tribe's permitting work, as well as training tribal staff in specialized topics such as GIS and Autocad. In some cases, GAP is the primary source of funding for tribal programs. In other cases, GAP funds only a portion of environmental programs (e.g., 25 percent of environmental programs for two tribes in EPA Region 5); however, even in these cases, tribes consider GAP funding essential.

Tribes emphasize how GAP provides a foundation for tribal environmental programs. One important way that GAP does this is by providing the framework to leverage and coordinate other resources, such as other EPA grants. GAP also provides continuity for tribal environmental programs over time, while at the same time allowing tribes to address new and emerging environmental issues. Tribes stress the importance of GAP's flexibility: several tribes perceive that GAP funding has fewer "strings attached" than other sources of funding, and therefore can be used to address tribal priorities. One tribal representative compared environmental capacity to a bush, growing in many different directions. The branches are the various components of a tribes environmental programs and GAP is the root.

While tribal representatives state that GAP funding is vital for establishing and maintaining an environmental presence, many perceive current levels of GAP funding as insufficient. Several tribes say that they have received static levels of GAP funding since the inception of the GAP program, even as they develop new environmental programs and carry out ever more diverse environmental program activities. For example, one tribe notes that it wants to take on issues like recycling, green buildings, and pollution prevention, but existing funding is not sufficient to address these emerging areas of environmental concern. One Eastern tribal representative expressed the view that GAP funding is primarily going to tribes in the West. This leads to insufficient funding for the tribe, which results in one staff person having to assume multiple responsibilities, and ultimately, limits the tribe's ability to maintain environmental capacity.

When asked about additional resources tribes need to develop their environmental programs, several tribes indicate that above all else, they need sustained, consistent funding over time to enable them to hire and retain sufficient qualified staff, and thereby retain institutional knowledge. GAP provides an important source of sustained funding, although some tribes note that the requirement to re-apply for GAP funding every year takes away from the stability of the GAP program and the staff that GAP supports. In addition to funding, tribes say they need infrastructure (especially for water and wastewater), equipment (e.g., computers, vehicles, and sampling equipment), and more staff to develop their environmental programs. Several tribes also mention the need for more support from EPA on enforcement programs, including both funding and technical support. One tribe mentioned that it would be helpful if EPA regions had more staff available to assist tribes with enforcement and developing codes and ordinances. A few tribes noted the difficulties of preparing TAS applications, and one tribe asked for EPA to speed its review of these applications. Another tribe explained that it needed help in preparing environmental assessments or environmental impact statements under NEPA.

Tribes sometimes have goals and priorities that GAP does not address, either because GAP funding is insufficient to meet these goals, or because these goals involve implementation of environmental programs. For example, one tribe mentioned that it has a goal of establishing regulatory programs, and tribal staff are looking for additional funding beyond GAP to support this goal. Another tribe said that it has goals and ordinances in place, and has trained staff, but now needs to start implementing its environmental programs and taking enforcement actions where needed. Overall, most tribes interviewed say that in order to meet tribal goals, they need to be able to use GAP funding for program implementation and maintenance, and they need additional funding to support this additional effort.

While most tribes perceive overall consistency between GAP goals and tribal priorities, they also pointed out that it is difficult to mesh the cultural and traditional values of the tribes with the bureaucratic and regulatory guidelines and definitions established by GAP. For example, some of the terms GAP uses, such as a “Tribal Environmental Agreement,” carry historical and cultural connotations that raise concerns for tribes (e.g., concerns about signing a formal agreement with the U.S. Government). Some tribal representatives are concerned that EPA’s interest in measuring tribal capacity will create a “gold standard” that EPA is expecting tribes to meet, and this may interfere with tribal sovereignty. One tribe recommended that EPA hire more American Indian POs, and suggested that POs visit the tribes and tribal councils more often to learn about their culture and the differences among the different tribes. Tribes also point out that EPA sometimes prioritizes specific programs (e.g., brownfields) that are not in response to a tribal priority or that tribes are not yet ready to address.¹⁵ In other cases, tribal councils want their environmental programs to do more than what is allowed under GAP funding. For example, one tribe noted that GAP does not support a tribe’s priority to protect sacred and historical sites from development using NEPA. Tribes emphasize that tribal sovereignty is a critical issue. While many tribal representatives say that EPA tries hard to address tribes’ needs and priorities, others feel that EPA is seeking “manifest destiny,” and is trying to change Indian ideals and erode tribal sovereignty. Finally, many tribal representatives emphasized that EPA has a trust responsibility with regard to tribes, and the federal government has the responsibility to help Tribal programs grow and fulfill their potential.

V. GAP SUPPORT FOR EPA’S STRATEGIC GOAL OF INCREASING TRIBES’ ABILITY TO BUILD ENVIRONMENTAL PROGRAM CAPACITY

EPA’s 2003 – 2008 Strategic Plan includes Objective 5.3, which is to build tribal capacity. Specifically, EPA seeks to “Assist all federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.”¹⁶ The strategic plan discusses means and strategies for achieving Objective 5.3, and mentions the GAP program as part of this discussion. It specifically states that “EPA will continue to distribute Indian General Assistance Program capacity building grants with the goal of establishing an environmental presence in all 572¹⁷ federally recognized tribes in the United States.” AIEO has tracked progress towards this goal in its Goal 5, Objective 5.3 Reporting System,¹⁸ and reports that the percentage of tribes that “had access to an environmental presence,” increased from 36 percent in 1996 to an estimated 90.4 percent in FY 2006, with a peak of 97 percent in FY 2004. Note that access to an environmental

¹⁵ It is not clear whether this comment was made specifically regarding GAP, or EPA funding sources in general.

¹⁶ The 2003 – 2008 Strategic Plan is available online at <http://www.epa.gov/ocfo/plan/2003sp.pdf>. Last accessed April 2007.

¹⁷ The number of federally recognized tribes has changed since the publication of the Strategic Plan: as of this writing there are 561 such tribes.

¹⁸ The Goal 5, Objective 5.3 Reporting System is available online at https://oasint.rtpnc.epa.gov/TATS/tats_prv/entry_page. Last accessed April 2007.

presence is defined as an annual dollar value of GAP funding that AIEO determines is needed to establish an environmental presence. That dollar value equaled \$75,000 in FY 1996 – 1997, and thereafter increased to \$110,000. EPA calculates the percentage of tribes with access to an environmental presence as the total amount of GAP funding awarded to all tribes divided by the product of the number of federally recognized tribes and the allocation needed to establish an environmental presence (i.e., \$110,000 or \$75,000, depending on the year).

EPA's updated 2006 - 2011 Strategic Plan includes an updated Objective 5.3 to "improve human health and the environment in Indian country." Specifically, EPA is working to, "protect human health and the environment on tribal lands by assisting federally-recognized tribes to build environmental management capacity, assess environmental conditions and measure results, and implement environmental programs in Indian country."¹⁹ EPA has modified its strategic targets in light of this new goal. Of the three strategic targets in the updated plan, one relates directly to implementation of environmental programs: increasing the percent of tribes implementing federal environmental programs in Indian country. The other two strategic targets could potentially be addressed through GAP:

- By 2011, increase the percent of tribes conducting EPA-approved environmental monitoring and assessment activities in Indian country to 26 percent. (FY 2005 baseline: 20 percent of 572 tribes.)
- By 2011, increase the percent of tribes with an environmental program to 67 percent. (FY 2005 baseline: 54 percent of 572 tribes.)

The strategic plan notes that, "A tribe is counted as having an environmental program for the purposes of this measure if the tribal government has taken at least one of the following actions, in combination with having an organizational structure which includes EPA-funded environmental office or coordinator that has been staffed in the most recent year:

- (a) Complete a Tier III TEA, as evidenced by a document signed by the tribal government and EPA.
- (b) Establish environmental laws, codes, regulations, ordinances, resolutions, policies, or environmental compliance programs, as evidenced by a document signed by the tribal government.
- (c) Complete solid and/or hazardous waste implementation activities.
- (d) Complete an inter-governmental environmental agreement (e.g., state-tribe MOA, federal-tribe MOA, etc)."

¹⁹ The 2006 – 2011 Strategic Plan is available online at <http://www.epa.gov/ocfo/plan/plan.htm>. Last accessed April 2007.

While we do not have data to assess progress toward all aspects of these strategic targets,²⁰ we can say that during the period 2000-2003, 26 percent of the 96 tribes in our sample for which we have GAP activity data developed a code, ordinance, or standard, although these activities may not be evidenced by a document signed by the tribal government. We also know that during the same time period, 73 percent of these tribes participated in waste activities, although these may or may not have included implementation activities.

As part of this evaluation, we asked regional POs about the extent to which they believe that GAP's goals, objectives, and activities align with or diverge from EPA's strategic goal for tribal environmental programs.²¹ Most POs responded that the GAP program is aligned with EPA's strategic goals for tribes, in that both GAP and EPA's strategic goals seek to build tribal environmental capacity, and GAP funds activities that are the building blocks of environmental capacity. GAP supports four common activities that support environmental programs: outreach, education, enforcement, and training, although the emphasis placed on any of these types of activities will vary depending on the specific region and the tribe. GAP also enables greater tribal participation in state and EPA environmental processes that lead to sounder environmental decisions. For example, in the state of Washington, tribal input and data led EPA to conclude that state-proposed water quality standards were not sufficiently protective of salmon, and EPA ultimately required the state to revise its standard.

POs expressed concern about the limitations of GAP that restrict funding to only capacity-building activities. In addition to building tribal program capacity, many POs believe it is necessary for EPA to support maintenance of mature tribal environmental programs, otherwise such programs will cease to operate, and it will be necessary to re-build program capacity. Some POs pointed out that EPA's strategic goals for Indian country include program implementation, but such implementation is not supported by GAP, an observation echoed by tribes. One tribe noted that it can acquire non-GAP grants to develop multi-media programs, but the question of whether the tribe can sustain these programs with non-GAP funds remains unanswered. Another tribe identified the apparent contradiction between EPA's strategic performance measures, which are tied to implementation outputs, and the focus of the GAP guidelines on core program development and capacity building.

In addition to raising concerns about the issue of program implementation, POs identified other challenges resulting from using GAP to meet EPA's strategic goals. One PO raised the concern that it will be difficult for some tribes to ever have delegated authority for environmental programs, given the frequent turnover of tribal staff. In addition, for tribes that have "checkerboard" land holdings and non-tribal residents living within the boundaries of reservations, tribes that seek to develop and enforce codes and ordinances may face fierce resistance from non-tribal residents that do not accept the tribe's jurisdiction. Many POs report that tribal needs and concerns vary widely. One PO expressed concern that regional allocations of GAP funds do not sufficiently align with tribal needs. Since all regions get the same amount of funding per tribe, a greater share of funding is not being distributed to those tribes with more

²⁰ This evaluation was designed prior to the release of the 2006 - 2011 Strategic Plan, therefore it was not tailored to measure progress toward strategic targets under this updated plan.

²¹ During the interview, the interviewer referred to the 2003 - 2008 Strategic Plan Objective 5.3.

pressing environmental concerns. Another PO pointed to the difficulty of quantifying the impact of the GAP program for a tribe, particularly the value of having a qualified staff person and environmental presence, and demonstrating the program's contributions to EPA's strategic goals.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

The results of this evaluation clearly establish that GAP has been effective in building the foundation of environmental capacity among tribes, defined as capability in one or more of the five indicator areas – technical, legal, enforcement, administrative, and communications. This capability, in turn, has allowed tribes to achieve an environmental presence in Indian country. Many tribes consider having an environmental presence, i.e., the ability to respond promptly and effectively to tribal environmental concerns as they arise, as the overarching indicator of environmental capacity.

To conclude, our review of data from fiscal years 2000 - 2003, along with recent interviews and discussions with EPA regional project officers (POs) and tribal representatives, suggests that:

- **The extent of capacity-building varies across indicator areas for tribes receiving GAP grants.** All but one tribe studied has demonstrated capability for at least one indicator; the largest proportion of tribes (44 percent) has demonstrated capability for two indicators. Only one tribe (1 percent) demonstrated capability for all five indicators.
- **Tribes receiving GAP have relatively well-developed technical and communications capabilities.** A majority (90 percent) of tribes studied have hired a professional employee, and most have participated in water and waste activities (73 percent), as well as internal and external communications activities (71 and 69 percent, respectively). Tribes use GAP funding to access the training and technical assistance needed to develop staff expertise and establish an environmental presence. GAP facilitates tribes' ability to network with other tribes, participate in regional partnerships, and communicate effectively with tribal Council and the reservation community about tribal environmental priorities and initiatives.
- **Tribes receiving GAP have less developed legal, enforcement, and administrative capacity compared to the other two indicators.** A quarter (26 percent) of tribes have developed codes, ordinances, or standards with assistance from GAP, but only a few (seven percent) have gone on to adopt them. An equal number of tribes (26 percent) have the ability to conduct inspections or other enforcement activities. Among the tribes studied, only 16 percent demonstrated fiscal administrative capability specific to the development of property and procurement standards. The results of A133 audits and regional GAP grant reviews suggest that a few tribes have experienced difficulty with executing fiscal administrative functions, such as tracking and documenting expenditures paid for by GAP, and tracking how GAP funds are spent when they are pooled with other grants. Note that the data that leads to this conclusion is now several years out of date, as with all of the other indicator data. Interviews with EPA POs suggests that tribal administrative capacity may have increased in recent years, as described below.
- **GAP has done much in recent years to clarify grant expectations and administrative requirements for tribes, and tribes in turn are increasingly meeting these expectations and requirements.** For example, EPA has developed a standard GAP work plan format for tribes to use, and has offered GAP management workshops. With continued outreach and assistance from GAP POs, tribes have significantly improved their ability to fulfill regional expectations for grants management, such as the timely

submittal of quality work plans and progress reports. Currently, a majority of tribes in most regions are submitting their work plans and progress reports on time. Apart from isolated instances where fiscal problems have been documented, tribes overall almost always or often meet their region's expectations for the execution of administrative functions under GAP.

- **Tribes report that restrictions on GAP funding that preclude using GAP grants for program implementation are now hindering tribal environmental program development.** Tribes say that while such restrictions made sense at the outset of GAP, the situation of tribal programs has evolved. Even though most tribes have more to do to develop the full complement of capabilities envisioned under GAP (as evidenced by the fact that only one percent of tribes studied have demonstrated capability for all five indicators of environmental capacity), some tribes feel that they have already built sufficient program capacity. These tribes now want to use their GAP funds to address other pressing needs for program maintenance and implementation. POs agree that tribes with mature programs have met the limits of capacity building and need funds to sustain what has been built with GAP.
- **Tribes perceive that GAP funding is essential to achieving their environmental goals, but current levels of funding are insufficient to address tribal priorities.** Consistent, stable, and sufficient funding is a key concern of tribes, since such funding is viewed as essential for maintaining a trained environmental staff that can respond to tribal environmental concerns. Tribes have successfully leveraged GAP resources to acquire additional grant funding from EPA media programs and non-EPA federal agencies; however, tribes caution that non-GAP grants are extremely competitive and often have more administrative requirements than GAP. These grants may come with limits on the type of programs and activities they support and may require substantially more matching funds than GAP. Tribes expressed concerns about relying on these grants to implement their environmental programs when their availability and level of funding can fluctuate from year to year.

Based on the results of our analysis and conversations with tribes, regional POs, and staff at EPA headquarters, we offer the following recommendations to EPA's American Indian Environmental Office for ways that EPA can enhance GAP to further support tribes' ability to establish and sustain their environmental programs.

RECOMMENDATIONS TO EPA

Recommendation 1: Consider developing a mechanism to support Tribal program implementation. EPA could pursue this in a number of different ways. As an initial step, EPA headquarters and regions could continue to promote and expand the use of Performance Partnership Grants (PPGs) by tribes. By combining GAP and other media-specific funds into one grant, PPGs afford tribes with the flexibility to allocate funding for programs and implementation activities that most effectively address tribal needs. They also improve efficiency by streamlining administrative requirements for tribes, such as the preparation of work plans and progress reports. AIEO has been encouraging use of PPGs in recent years, although relatively few tribes are currently using them. The relatively infrequent use of PPGs is partially due to regional preferences, but mainly a result of tribes' perception that PPGs are difficult to put

in place and administer. Further work with tribes to communicate and possibly simplify the PPG process could potentially increase the use of PPGs.

Note that since PPGs comprise grants that are subject to variations in funding levels and availability, this may not be a sustainable option for tribes over the long-term. For this reason, AIEO could eventually establish a second tier of GAP funding - "GAP plus" – to fund program implementation for those Tribes that show they have met key indicators of capacity under GAP. Another approach could be to establish a block grant for tribes similar to those established for U.S. territories. In the case of a second-tier GAP grant or block grant, the guaranteed availability of funds for implementation would alleviate the uncertainty currently associated with individual media grants. This approach would also provide tribes with funding for program activities not covered under the 20 grants now eligible for incorporation into a PPG. Finally, a second tier GAP or inclusive block grant would reduce the administrative burden on tribes associated with applying for and managing numerous grants.

Recommendation 2: Consider working with tribes and regions to enhance administrative, legal, and enforcement capacity. To help tribes build administrative capacity, EPA could coordinate more directly with regions to ensure that the frequency and level of programmatic resources provided, such as GAP training and support for tribal grants management, keep pace with tribal needs, particularly as new tribal administrative personnel are hired. For tribes that do not have sufficient funding through GAP or other sources to develop legal services, EPA regions could offer legal support to help tribes enact their own codes, ordinances, and standards. In cases where tribes feel that they cannot or do not wish to implement their own environmental laws and regulations, AIEO should coordinate directly with tribes and clarify roles between tribal environmental programs and EPA. Although EPA considers tribal delegation of environmental programs as an important long-term objective, TAS may not be desired or feasible for many tribes. In these instances, AIEO should consider developing a coherent plan for working with tribes to protect the environment, while respecting tribal sovereignty.

Recommendation 3: Raise awareness of innovative environmental policy approaches to complement traditional codes and standards.¹ For example, some tribes may benefit from a greater emphasis on pollution prevention education, self-certification, and compliance assistance inspections, rather than solely focusing on writing codes, conducting inspections, and taking enforcement actions. For example, tribes may wish to consider using pollution prevention materials that have been developed for particular sectors of concern (see, for example, materials on sectors such as medical facilities, schools, and auto repair shops available from the Pollution Prevention Resource Exchange²). Tribes may also wish to consider using Environmental Results Programs (ERP), such as those that have been funded under the EPA State Innovation Grant program, or adopting elements of ERP.³ To the extent that tribes undertake innovative

¹ Innovative policy approaches could potentially be used in place of traditional regulatory and enforcement programs, if such approaches could ensure environmental protection. Innovative policy approaches could also be used as an interim step, to be used until such time as tribes have traditional regulatory programs in place.

² Available online at http://www.p2rx.org/P2InfoNexpert/TopicHubs_2.cfm. Last accessed April 2007.

³ Information about State Innovation Grants, including ERPs, is available online at <http://www.epa.gov/innovation/stategrants/>. Note that State Innovation Grant funding is not currently available directly for tribes (but could be available to a tribe in partnership with a state).

approaches to preventing pollution and encouraging environmental stewardship, it would make sense for tribes to leverage the considerable experience of EPA and states in developing innovative policy tools and approaches, as well as specific outreach materials such as pollution prevention and compliance assistance fact sheets. Tribes may also benefit from working together to implement innovative approaches. For example, if tribes were interested in exploring ERP as a potential policy approach, it may make sense for multiple tribes in a region or in neighboring regions to work together to develop an ERP for a sector of concern. AIEO and regions could help tribes by raising awareness of innovative policy approaches, readily available materials, and potential funding sources.

Recommendation 4: Acknowledge cross-cultural differences, and continue working with tribes to maintain a respectful dialog. A key difference in perspective is that tribes see GAP funding as a right - an extension of the trust responsibility that EPA has to tribal nations. EPA views tribes as grantees that must meet certain requirements, particularly administrative requirements, to show that tribes are accountable for funds that have been spent. Because tribes vary considerably in their population, land base, wealth, needs, and priorities, they feel that environmental performance measures should be couched in terms of measuring tribes' progress toward their goals and not achieving a single "gold standard." There is inherent tension in the differences between tribal and EPA perspectives, but opportunities to bridge these differences exist. From the tribes' perspective, one way to strengthen understanding is to hire more Native Americans to serve as regional POs and tribal coordinators. More frequent site visits to tribes by AIEO and EPA regional program staff would also help to underscore the diversity of tribal perspective, priorities, and approaches to environmental protection.

Recommendation 5: Track progress toward achievement of the new 2006-2011 strategic goals and targets. With the addition of new strategic targets aimed at measuring tribes implementation of monitoring and assessment activities, EPA needs to develop indicators that support these goals and targets (e.g., number of tribes that have completed a Tier III TEA, number of tribes that have completed an inter-governmental environmental agreement (MOAs), etc.), and regularly track how many tribes are meeting these indicators. At a fundamental level, AIEO will need to ensure that its data collection systems allow for the effective capture and tracking of indicators related to these targets. In establishing future strategic goals and targets, AIEO will also need to consider the degree to which its proposed performance measures align with tribal priorities and perspectives and the feasibility of tribes' of achieving them. For example, given the reluctance of many tribes to enter into TEAs and MOAs because of concerns over tribal sovereignty, the selection of these agreements as indicators of tribal performance may not provide the most accurate estimation of a tribe's environmental capacity or the degree to which it has successfully implemented specific program components. Further, AIEO needs to consider that its five-year cycle for setting strategic goals and targets may be too short to effectively track and measure tribal progress, given that tribal environmental priorities and abilities may necessitate implementation of programs over a longer time period.

Appendix A

GAP EVALUATION QUESTIONS

APPENDIX A

EVALUATION QUESTIONS	INFORMATION THAT CAN HELP ANSWER QUESTION
1a. Is GAP being accessed by all federally recognized tribes?	<ul style="list-style-type: none"> • Number and percentage of federally recognized tribes that have ever received GAP funds
1b. Why are some tribes not involved in GAP?	<ul style="list-style-type: none"> • Regional coordinators' perceptions as to why tribes may not seek GAP funding (these may include having access to other sources of funds, the perception that participation in GAP is too onerous, etc.)
1c. Are there tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?	<ul style="list-style-type: none"> • Regional coordinators' perceptions as to why tribes may have dropped of GAP grant rolls.
2a. Are tribal governments using the resources (technical, fiscal, and programmatic) provided as a component of GAP? How often are GAP resources accessed?	<ul style="list-style-type: none"> • Number and type of GAP resources that have been delivered to tribes: <ul style="list-style-type: none"> ▲ GAP funding provided to tribes (i.e., fiscal resources) ▲ Technical assistance and media specific trainings (i.e., technical resources) ▲ Grants management training (i.e., programmatic resources) • Tribal access of GAP resources: <ul style="list-style-type: none"> ▲ Tribal participation in technical and media-specific trainings ▲ Tribal participation in grants management training
2b. How are tribes using GAP resources?	<ul style="list-style-type: none"> • Tribal staff and activities funded through GAP (<i>include solid waste implementation</i>)
2c. To what extent have tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?	<ul style="list-style-type: none"> • Regional coordinators' perceptions about the quality, timeliness, and completeness of work plans and progress reports received • Timing of grant end date vs. final close out of the grant - this is an indicator of the degree to which the grantee met program expectations - the shorter the period of time between grant end date and final closeout, the more likely that tribes met expectations. • Results of administrative post award monitoring audits

EVALUATION QUESTIONS	INFORMATION THAT CAN HELP ANSWER QUESTION
<p>2d. How does participation in GAP increase understanding of how to develop a tribal environmental program?</p>	<ul style="list-style-type: none"> • Self reported increase in knowledge and understanding about the necessary steps in developing a tribal environmental program • Self-reported increase in skills needed to develop tribal environmental programs • Self-reported change in awareness and commitment to environmental programs in tribes
<p>3a. What indicators of tribal environmental capacity exist?</p> <p>3b. To what extent have tribes achieved environmental capacity as suggested by the presence of these indicators?</p>	<p>Overarching Indicator of Tribal Environmental Capacity:</p> <ul style="list-style-type: none"> • Number of GAP recipients that secured ongoing funding from other EPA sources. <i>[Note that availability of other sources of funding may be a limiting factor unrelated tribes' environmental capacity.]</i> • Legal Capability <ul style="list-style-type: none"> • Number of GAP recipients that have developed tribal codes, standards, and/or enforcement programs to control pollution • Enforcement Capability <ul style="list-style-type: none"> • Presence of tribal environmental staff person(s) charged with enforcement duties • Technical Capability <ul style="list-style-type: none"> • Number of GAP recipients with one or more staff specifically tasked with managing environmental programs (e.g., Environmental Director) • Size and composition of tribal environmental staff • Number of environmental programs being carried out in different media annually by tribes. • Number of GAP recipients that have taken environmental training • Communications Capability <ul style="list-style-type: none"> • Percent of GAP recipients that have conducted community education and outreach, based on the grant work plan • Number of GAP recipients that have executed agreements with other jurisdictions for management of on- or off-reservation resources • Tribal participation in EPA or tribal workgroups and/or Task Forces • Extent of tribal environmental staff's communication of with tribal Council

EVALUATION QUESTIONS	INFORMATION THAT CAN HELP ANSWER QUESTION
	<ul style="list-style-type: none"> • Administrative Capability <ul style="list-style-type: none"> • How long has person tasked with managing environmental programs (e.g. Environmental Director) been in that position • Number of major findings on A133 audits (which are conducted for any tribe that spends \$500K or more) • On-site grants management review
3c. What factors contribute to the achievement of environmental capacity, and what is the impact of each factor?	
<i>Tribal Priorities</i>	<ul style="list-style-type: none"> • Degree of tribal Council support for environmental programs • Does tribe have clear environmental priorities? • Rate of change in tribal governments - how often do Council members change?
<i>Tribal Staffing</i>	<ul style="list-style-type: none"> • Turnover rate of tribal Environmental Director and/or staff • Qualifications of tribal Environmental Director and/or staff • Tribal Environmental Staff and/or Director salary levels
<i>Tribal Funding</i>	<ul style="list-style-type: none"> • GAP funding amounts • GAP funding consistency over time (e.g., number of consecutive GAP grants awarded over time, range and average number of consecutive GAP grants received by tribes over time) • Tribe's ability to secure funding beyond GAP (<i>Note, securing funding is both an indicator of tribal environmental capacity and a factor influencing achievement of environmental capacity - through interview discussions, try to understand whether securing other sources of funding is more a cause or effect of success in the GAP program.</i>)
<i>Communication</i>	<ul style="list-style-type: none"> • Degree of information sharing among tribes • Degree to which tribes request information from EPA • Degree to which EPA provides information to tribes -- specifically extent to which tribes receiving hands-on technical assistance, oversight, or on-site visits.

EVALUATION QUESTIONS	INFORMATION THAT CAN HELP ANSWER QUESTION
<i>Regional Activities</i>	<ul style="list-style-type: none"> • Structure of EPA regional office - specifically, at what level the tribal office located (in the administrators office or elsewhere - the hypothesis is that the higher the level, the more likely it is that tribal issues will receive attention and resources). • Experience and longevity of EPA project officers and technical contacts • Grantee caseload for EPA project officers
3d. What is the relative contribution of GAP toward achieving capacity?	<ul style="list-style-type: none"> • Sequence of grants received by tribes (i.e., do tribes receive GAP grants before other grants? If so, this would suggest that GAP may contribute to ability to receive other grants) • Use of non-GAP funding <i>(Note - both of these indicators are limited by data on other sources of funds outside of EPA, e.g. grants from BIA or tribes' internal funds.)</i>
4. Is the GAP providing adequate outputs to achieve tribal goals and priorities?	<ul style="list-style-type: none"> • Tribes' perceptions about whether GAP is providing the type and amount of resources that they need to meet their environmental goals and priorities • Are there additional resources that tribes feel they would need to have in order to address their goals and priorities? • Is environmental capacity building a priority for tribes receiving GAP grants?
5. To what degree does GAP support EPA's strategic goal of increasing tribes' ability to build environmental program capacity? <ul style="list-style-type: none"> • How do GAP's <i>goals</i> currently align with or diverge from EPA's strategic goal for GAP and other multi-media programs? • How do GAP's <i>objectives</i> align with or diverge from EPA's strategic goal for GAP and other multi-media programs? • How do tribal GAP <i>activities</i> align with or diverge from EPA's strategic goal for GAP and other multi-media programs? 	<ul style="list-style-type: none"> • Summary of GAP goals and objectives • Summary of EPA's strategic goals and objectives • Summary of tribal activities funded by GAP, and other outcomes assessed through the evaluation

Appendix B

INTERVIEW GUIDE FOR REGIONAL GAP PROJECT OFFICERS

APPENDIX B

Interview Guide for GAP Regional Project Officers

[Introductions] Thank you for agreeing to talk with us today. As you may know, this interview is part of a broader evaluation of the GAP program that we are conducting at the request of EPA's American Indian Environmental Office (AIEO). The EPA General Assistance Program (GAP) as envisioned by Congress includes two key elements:

- 1) To provide general assistance grants to build capacity to administer environmental regulatory programs.
- 2) To provide technical assistance from EPA to tribal governments and intertribal consortia in the development of multimedia programs to address environmental issues on tribal lands.

While tribes and EPA focus on the funding aspects of GAP, technical assistance is a substantial and significant component of the Program. Examples of assistance include:

- EPA linking tribal staff with the appropriate EPA contacts.
- EPA-sponsored training on administrative or technical skills needed for establishing tribal multimedia programs.
- EPA review of tribal proposals for establishing programmatic capability, such as codes, ordinances, and management plans.
- EPA site visits to review and assist tribes with programmatic and administrative decision making.

The purpose of this interview is to gather your perspective regarding the effectiveness of the GAP program and how GAP supports EPA's strategic goals of increasing Tribes' ability to build environmental capacity. Your participation in this interview, along with input from Tribes and our initial database research, will enhance our understanding of GAP and will form an important source of information for this evaluation. Because “environmental capacity” is such a key concept for this evaluation, we are using a definition based on EPA’s 2000 GAP guidelines. For this evaluation, “environmental capacity” means that a Tribe has established the administrative, legal, technical and enforcement capability necessary to develop and implement a Tribal environmental program, as well as the communications capability to work with Federal, State, Local, Tribal, and other environmental officials. We ask that you base your answers to questions about environmental capacity on this statutory definition.

We have completed our analysis of data from several EPA databases that contain information about Tribal grants and will ask you for your insights on these preliminary findings during this interview. Upon completion of the data collection and analysis phase of the evaluation, we will compile the results and our conclusions in a report to AIEO, which will be available for you to review. We anticipate that the results of this evaluation will help AIEO demonstrate the successes of the Tribal GAP to stakeholders and identify opportunities for improvement. Finally, we will maintain the confidentiality

of your responses to the interview questions; any data obtained through this interview will be analyzed in aggregate with other interview data.

Do you have any questions to ask before I start the interview?

Interview questions

1. To begin, please describe how you are involved with GAP grants in your current position with EPA.

Evaluation Questions: (1a) Is GAP being accessed by all federally recognized Tribes? (1b) Why are some Tribes not involved in GAP? (1c) Are there Tribes that received GAP grants at one time but which no longer receive GAP grants? If so, why?

The next two questions in this interview pertain to Tribes' participation in GAP in your Region:

2. To your knowledge, are there any federally recognized Tribes in your Region that have not received GAP grants since 1994? If yes, what do you think is the reason that these Tribes have not received GAP grants (choose all that apply):
 - They have not applied for GAP grants. If so, why do you think they have not applied?
 - Their applications have not been accepted. If so, what led them to be not accepted?
 - They have adopted a policy of not accepting Federal grant money.
 - Other reasons. (Please explain)
3. To your knowledge, are there any federally recognized Tribes in your Region that have received GAP grants since 1994, but no longer have a GAP grant? If so, what do you believe caused the Tribe to drop off of the GAP grant rolls?
4. For Tribes that did not receive GAP grants, do you think the lack of GAP grants has hindered these Tribes' development of environmental programs? How?

Evaluation Question: (2a) Are Tribal governments using the resources (technical, fiscal, and programmatic) provided through the GAP? How often are GAP resources accessed?

According to statute, GAP was established to provide general assistance to Tribes in the form of monetary support to build environmental capacity as well as technical assistance for developing multimedia environmental programs on Indian lands. This next question pertains to Tribes' utilization of all the resources – fiscal, technical, and programmatic – provided directly and indirectly through the GAP.

5. Overall, would you say Tribes in your Region utilize the resources (e.g., technical assistance and training, grants management training) provided as a component of GAP? If yes, which resources do Tribes most frequently access? Which resources do Tribes least frequently access?

Evaluation Question: (2c) To what extent have Tribes met program expectations for grants management, execution of administrative functions, and carrying out proposed activities?

The next set of questions pertains to the administration of GAP grants by Tribes in your Region for which you have oversight:

6. To what extent have Tribes in your Region met expectations established by your region for GAP for each of the following areas?

	Almost always	Often	Sometimes	Seldom	Almost never	Don't Know
Grants management						
Execution of administrative functions						
Carrying out proposed activities						

7. To your knowledge, what proportion of Tribes in your Region submits GAP work plans and progress reports on time?
8. What trends have you seen in the timeliness of GAP work plans and progress reports submitted by Tribes in your Region over time?
9. To your knowledge, what proportion of Tribes in your Region submits GAP work plans and progress reports that are complete?
10. What trends have you seen in the completeness of GAP work plans and progress reports submitted by Tribes in your Region over time?
11. To your knowledge, what proportion of Tribes in your Region submits quality GAP work plans and progress reports?
12. What trends have you seen in the quality of Tribes' GAP work plans and progress reports over time?

Evaluation Questions: (3a) What indicators of Tribal environmental capacity exist? (3b) To what extent have Tribes achieved environmental capacity as suggested by these indicators? (3c) What factors contribute to the achievement of environmental capacity, and what is the impact of each factor?

13. In your experience, what is the best indicator that a Tribe is achieving environmental capacity?
14. To your knowledge, to what extent are Tribes in your Region achieving environmental capacity as defined by this indicator?
 - Almost never
 - Seldom
 - Sometimes
 - Often
 - Almost always
15. What proportion of Tribes in your Region would you say have received funding for environmental programs from sources other than GAP?
16. In your experience, when a Tribe secures funding from sources outside of GAP, does that indicate that the Tribe has been successful in using its GAP grant to develop environmental capacity?

[Provide summary of findings from database analysis of legal, enforcement, technical and communications capabilities, and ask for comments.]

The next set of questions pertains to administrative capability achieved by Tribes in your Region that have received GAP funding. We are considering administrative capability as one element of environmental capacity.

17. What would you say, historically, is the average length of time for a Tribal environmental manager or director to remain in his or her position?
18. Do you know if there have been any major findings on audits (e.g., A133, IG, etc.) conducted for Tribes in your Region? If yes, please describe.
19. What information do you have about the results of on-site GAP grants management reviews for Tribes in your Region?

The next set of questions pertains to factors that may influence the achievement of environmental capacity:

20. What factors would you say are the most important contributors to Tribes' ability to achieve environmental capacity? Please describe how these factors influence Tribe's achievement of environmental capacity.
21. Next, I am going to read you a list of factors that may influence Tribes ability to achieve environmental capacity. Based on your knowledge and experience, to

what degree would you say each factor influences Tribes' ability to achieve environmental capacity?

For each factor where the interviewee indicates it almost always has an influence on environmental capacity, follow up by asking how the indicator influences environmental capacity.

	Almost always	Often	Sometimes	Seldom	Almost never	Don't Know
Access to funding outside of GAP						
Tribal Council support for environmental programs						
Clear Tribal environmental priorities						
Planning documents prepared by Tribes (e.g., five year plans)						
Rate of change in Tribal government leadership (e.g., Council members)						
Turnover rate of Tribal Environmental Director and/or staff.						
Qualifications of Tribal Environmental Director and/or staff						
Degree of information sharing among Tribes						
Frequency with which Tribes request information from EPA						
Cohesiveness of a Tribe's land base						
The status of the Tribal Office in your Region (e.g., its location in the organizational chart)						
Experience, knowledge, and longevity of EPA project officers						
Year-to-year shifts in funding priorities due to						

	Almost always	Often	Sometimes	Seldom	Almost never	Don't Know
changing priorities at EPA						
Different perceptions about funding priorities between Tribes and EPA						
Extent to which the Regions consult with the Tribes						
Changes in the GAP funding process						

Evaluation Question: (5) To what degree does GAP support EPA’s strategic goal of increasing Tribes’ ability to build environmental program capacity?

The final three questions pertain EPA's strategic goal of building Tribal environmental capacity under Goal 5.3 of its 2003-2008 Strategic Plan:

22. Based on your understanding of GAP, how do you think GAP's *goals and objectives* align with or diverge from EPA's strategic goal for Tribal environmental programs?

23. Based on your understanding of GAP, how do you think Tribal GAP *activities* align with or diverge from EPA's strategic goal for Tribal environmental programs?

24. Based on your experience, how would you change GAP to improve support for EPA’s strategic goals for Tribal environmental programs? How would you change GAP to improve support for Tribal goals and priorities?

Appendix C

DISCUSSION GUIDE FOR TRIBES

Appendix C

Discussion Guide and Proposed Questions for Tribal Panel Discussion

Thank you for joining us today. This panel discussion is part of a broader evaluation of the General Assistance Program (GAP) that we are conducting at the request of EPA's American Indian Environmental Office (AIEO). We are conducting this discussion to solicit information about Tribes' environmental goals and your opinions on how GAP has supported your Tribe's environmental programming efforts. Your participation on the panel will enhance our understanding of GAP and will form an important source of information for this evaluation. Upon completion of the data collection and analysis phase of the evaluation, we will compile the results and our conclusions in a report to AIEO, which will be available for you to review.

As you may know, from EPA's perspective the primary purpose of the GAP is to help federally recognized Tribes and intertribal consortia build the basic components of a Tribal environmental program, which may include planning, developing, and establishing the administrative, technical, legal, enforcement, communication, and outreach infrastructure. The primary purpose of this evaluation is to determine how effective GAP has been in building Tribal environmental capacity among those Tribes receiving funds. Since "environmental capacity" is such a key concept for this evaluation and we want to very clear about its meaning when we ask about it in our questions, we are providing a definition based on EPA's 2000 GAP guidelines.

For the purpose of this evaluation, "environmental capacity" means that a Tribe has established the administrative, legal, technical and enforcement capability necessary to develop and implement a Tribal environmental program, as well as the communications capability to work with Federal, State, Local, Tribal, and other environmental officials.

You may also be aware that the EPA General Assistance Program (GAP) as envisioned by Congress includes two key elements:

- 1) To provide general assistance grants to build capacity to administer environmental regulatory programs.
- 2) To provide technical assistance from EPA to Tribal governments and intertribal consortia in the development of multimedia programs to address environmental issues on Tribal lands.

While Tribes and EPA focus on the funding aspects of GAP, technical assistance is a substantial and significant component of the Program. Examples of assistance include:

- EPA linking Tribal staff with the appropriate EPA contacts.
- EPA-sponsored training on administrative or technical skills needed for establishing Tribal multimedia programs.
- EPA review of Tribal proposals for establishing programmatic capability, such as codes, ordinances, and management plans.

- EPA site visits to review and assist Tribes with programmatic and administrative decision-making.

Note that this is an evaluation of the GAP program, not the Tribes. Where we ask questions about Tribes' achievements in building environmental capacity, or barriers to those achievements, the purpose of our question is to understand whether EPA's GAP program is working for its intended purpose for the wide array of Tribes that receive GAP grants, and how it could be improved. This evaluation is not intended as a critique of Tribes' environmental achievements or a comparison of achievements across Tribes.

We will begin our conversation with introductions and then proceed with a discussion of Tribal environmental programs and your Tribes' participation in and experiences with GAP, per the questions below.

Introductory Questions:

Let's begin with questions about Tribes' environmental goals and priorities and their relationship to GAP and environmental capacity. While Question 2, below, asks for Tribal definitions of environmental capacity, we ask that you base your answers to all subsequent questions about environmental capacity on the statutory definition provided.

A. Tribal Environmental Capacity

1. Based on your understanding of GAP, how do the program's goals compare with the environmental goals and priorities of your Tribe?
2. How does your Tribe define environmental capacity?
3. What is the most important indicator of a Tribe's environmental capacity, as defined by GAP?

B. Contributors to Environmental Capacity Development

4. Which factors influence environmental capacity attained by Tribes (for example, specific characteristics of Regional EPA offices or of Tribes)?
5. How have other program areas within EPA, e.g., media programs, helped your Tribe build environmental capacity?
6. How have non-EPA entities, e.g., other federal agencies, state agencies, and NGOs, helped your Tribe build environmental capacity?

Transitional Questions:

Next let's discuss GAP grants and their overall impact on Tribes' level of resources and environmental programming efforts.

C. GAP Funding Support

7. In thinking about your Tribe's funding over time, how has GAP supported your Tribe's environmental goals and priorities compared to other funding sources?
8. Which resources provided by GAP (e.g., funds, technical assistance, training) have been most helpful to your Tribe's environmental programming efforts? Which GAP resources have not been particularly helpful?

D. Other Sources of Support

9. What other kind of funding has your Tribe received in support of your Tribe's environmental goals and priorities?
10. What additional resources does your Tribe need to develop your environmental programs?

Key Questions:

Now let's talk about specific ways in which GAP has influenced Tribes' ability to carry out environmental programs.

E. GAP Influence on Tribal Approach to Environmental Programming

11. How has GAP influenced your Tribes approach to developing and sustaining Tribal environmental programs?
12. How has GAP influenced the way you, Tribal members, and particularly members of your Tribal Council:
 - a. Establish priorities and plan your environmental programs?
 - b. Administer your Tribe's environmental programs, (e.g., hiring, training, funding)?
 - c. Communicate to others within and outside your Tribe about environmental issues of importance to your Tribe?

F. Environmental Programs Funded by GAP

13. What kinds of activities or program elements have been funded through your Tribe's GAP grants? How does this compare to the activities or program elements funded through other funding sources your Tribe has received?
14. Which of your environmental programs have benefited most from GAP? Which of these programs have benefited least from GAP?

Final Questions:

15. Considering everything we have discussed so far, how would you change GAP to support your Tribe's goals and priorities?
16. Have we missed anything?

Appendix D

LIST OF TRIBES IN EVALUATION SAMPLE

Appendix D

Tribes Selected for GAP Sample			
EPA Region	Tribe Name ¹	In GAP Database	Tribes per Region
1	Aroostook Band of Micmac Indians of Maine	Y	2
1	Penobscot Tribe of Maine	Y	
2	Seneca Nation of New York ²		1
4	Miccosukee Tribe of Indians of Florida	Y	1
5	Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation, Wisconsin	Y	7
5	Fond du Lac Band	Y	
5	Grand Portage Band	Y	
5	Grand Traverse Band of Ottawa and Chippewa Indians, Michigan (previously listed as the Grand Traverse Band of Ottawa & Chippewa Indians of Michigan)	Y	
5	Keweenaw Bay Indian Community, Michigan	Y	
5	Lower Sioux Indian Community in the State of Minnesota	Y	
5	Oneida Tribe of Indians of Wisconsin	Y	
6	Absentee-Shawnee Tribe of Indians of Oklahoma	Y	14
6	Cherokee Nation, Oklahoma	Y	
6	Kaw Nation, Oklahoma	Y	
6	Muscogee (Creek) Nation, Oklahoma	Y	
6	Otoe-Missouria Tribe of Indians, Oklahoma	Y	
6	Pueblo of Laguna, New Mexico	Y	
6	Pueblo of Picuris, New Mexico	Y	
6	Pueblo of San Felipe, New Mexico	Y	
6	Pueblo of Taos, New Mexico	Y	
6	Seminole Nation of Oklahoma	Y	
6	Shawnee Tribe, Oklahoma	Y	
6	Tonkawa Tribe of Indians of Oklahoma	Y	
6	Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma	Y	
6	Ysleta Del Sur Pueblo of Texas	Y	
7	Prairie Band of Potawatomi Nation, Kansas	Y	2
7	Sac & Fox Tribe of the Mississippi in Iowa	Y	
8	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota (formerly the Sisseton-Wahpeton Sioux Tribe of the Lake Traverse Reservation)	Y	6
8	Skull Valley Band of Goshute Indians of Utah	Y	
8	Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado	Y	
8	Standing Rock Sioux Tribe of North & South Dakota	Y	
8	Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota	Y	
8	Ute Mountain Tribe of the Ute Mountain Reservation, Colorado New Mexico & Utah	Y	

¹ Per the BIA List published in 70 FR 71194 (11/25/05).

² Although limited data for the Seneca Nation of New York are included in the GAP Activity table for the years 2000-2003, there are no data for the tribe included in the GAP Position table. For this reason, we did not list this tribe with the other for which data are available in both the Activity and Position tables. We used data for this tribe obtained from file reviews to complement the limited data included in the GAP database.

Tribes Selected for GAP Sample			
EPA Region	Tribe Name	In GAP Database	Tribes per Region
9	Agua Caliente Band of Cahuilla Indians of the Agua Caliente Indian Reservation, California	Y	30
9	Buena Vista Rancheria of Me-Wuk Indians of California		
9	Cabazon Band of Mission Indians, California (previously listed as the Cabazon Band of Cahuilla Mission Indians of the Cabazon Reservation)	Y	
9	Campo Band of Diegueno Mission Indians of the Campo Indian Reservation, California	Y	
9	Elem Indian Colony of Pomo Indians of the Sulphur Bank Rancheria, California	Y	
9	Enterprise Rancheria of Maidu Indians of California	Y	
9	Ewiiapaayp Band of Kumeyaay Indians, California (formerly the Cuyapaipe Community of Diegueno Mission Indians of the Cuyapaipe Reservation)		
9	Hopi Tribe of Arizona	Y	
9	Jamul Indian Village of California	Y	
9	Kashia Band of Pomo Indians of the Stewarts Point Rancheria, California	Y	
9	La Jolla Band of Luiseno Mission Indians of the La Jolla Reservation, California	Y	
9	La Posta Band of Diegueno Mission Indians of the La Posta Indian Reservation, California	Y	
9	Manchester Band of Pomo Indians of the Manchester-Point Arena Rancheria, California		
9	Middletown Rancheria of Pomo Indians of California	Y	
9	Paiute-Shoshone Indians of the Lone Pine Community of the Lone Pine Reservation, California	Y	
9	Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada		
9	Pala Band of Luiseno Mission Indians of the Pala Reservation, California	Y	
9	Paskenta Band of Nomlaki Indians of California	Y	
9	Quartz Valley Indian Community of the Quartz Valley Reservation of California		
9	Quechan Tribe of the Fort Yuma Indian Reservation, California & Arizona	Y	
9	Redding Rancheria, California		
9	Santa Rosa Indian Community of the Santa Rosa Rancheria, California	Y	
9	Santa Ynez Band of Chumash Mission Indians of the Santa Ynez Reservation, California		
9	Scotts Valley Band of Pomo Indians of California	Y	
9	Sherwood Valley Rancheria of Pomo Indians of California	Y	
9	Tuolumne Band of Me-Wuk Indians of the Tuolumne Rancheria of California	Y	
9	Habematolel Pomo of Upper Lake, California (formerly the Upper Lake Band of Pomo Indians of Upper Lake Rancheria of California)	Y	
9	Walker River Paiute Tribe of the Walker River Reservation, Nevada	Y	
9	White Mountain Apache Tribe of the Fort Apache Reservation, Arizona	Y	
9	Yavapai-Apache Nation of the Camp Verde Indian Reservation, Arizona		

Tribes Selected for GAP Sample			
EPA Region	Tribes Selected for GAP Sample	In GAP Database	No. Tribes per Region
10	Agdaagux Tribe of King Cove		48
10	Arctic Village		
10	Chilkat Indian Village (Klukwan)	Y	
10	Chilkoot Indian Association (Haines)		
10	Chinik Eskimo Community (Golovin)		
10	Circle Native Community		
10	Coeur D'Alene Tribe of the Coeur D'Alene Reservation, Idaho		
10	Confederated Tribes of the Grand Ronde Community of Oregon		
10	Confederated Tribes of the Siletz Reservation, Oregon		
10	Egegik Village		
10	Eklutna Native Village		
10	Emmonak Village		
10	Gulkana Village	Y	
10	Hoonah Indian Association		
10	Inupiat Community of the Arctic Slope		
10	Kenaitze Indian Tribe		
10	Kootenai Tribe of Idaho		
10	McGrath Native Village		
10	Naknek Native Village		
10	Native Village of Ambler		
10	Native Village of Eagle		
10	Native Village of Eyak (Cordova)		
10	Native Village of Kivalina		
10	Native Village of Kongiganak		
10	Native Village of Kotzebue	Y	
10	Native Village of Kwigillingok		
10	Native Village of Napaimute		
10	Native Village of Nightmute		
10	Native Village of Nunapitchuk		
10	Native Village of Point Lay		
10	Native Village of Ruby		
10	Native Village of Selawik		
10	Native Village of Tanacross		
10	Native Village of Tatitlek		
10	Native Village of Tazlina		
10	Newtok Village		
10	Nondalton Village		
10	Northway Village		
10	Organized Village of Kwethluk		
10	Pedro Bay Village		
10	Petersburg Indian Association		
10	Sauk-Suiattle Indian Tribe of Washington		

Tribes Selected for GAP Sample			
EPA Region	Tribe Name	In GAP Database	No. Tribes per Region
10	Shoshone-Bannock Tribes of the Fort Hall Reservation of Idaho		
10	Skokomish Indian Tribe of the Skokomish Reservation, Washington		
10	Twin Hills Village		
10	Village of Aniak		
10	Village of Salamatoff		
10	Yakutat Tlingit Tribe		
Sample Size			

Appendix E

GPRA CODES AND ACTIVITY CATEGORIES

<i>Tribe Name:</i>		<i>Grant Number(s):</i>			
<i>ACT_GPRA_I</i>	<i>CATEGORY</i>	<i>SUB1</i>	<i>SUB2</i>	<i>SUB3</i>	<i>Note</i>
<input type="checkbox"/>	383 AIR ACTIVITIES				
<input type="checkbox"/>	109 AIR ACTIVITIES	External Air Quality			
<input type="checkbox"/>	100 AIR ACTIVITIES	External Air Quality	Air Grants Administration		
<input type="checkbox"/>	101 AIR ACTIVITIES	External Air Quality	Building Survey		
<input type="checkbox"/>	102 AIR ACTIVITIES	External Air Quality	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	103 AIR ACTIVITIES	External Air Quality	Development of Codes and Ordinances		
<input type="checkbox"/>	104 AIR ACTIVITIES	External Air Quality	Development of Monitoring Capacity		
<input type="checkbox"/>	105 AIR ACTIVITIES	External Air Quality	Development of QAPPs		
<input type="checkbox"/>	384 AIR ACTIVITIES	External Air Quality	General Program Development		
<input type="checkbox"/>	106 AIR ACTIVITIES	External Air Quality	Source Inventory		
<input type="checkbox"/>	107 AIR ACTIVITIES	External Air Quality	Source Inventory-T14(9005)		
<input type="checkbox"/>	108 AIR ACTIVITIES	External Air Quality	Staff Program Capacity Development		
<input type="checkbox"/>	119 AIR ACTIVITIES	Indoor Air Quality			
<input type="checkbox"/>	110 AIR ACTIVITIES	Indoor Air Quality	Air Grants Administration		
<input type="checkbox"/>	111 AIR ACTIVITIES	Indoor Air Quality	Building Survey		
<input type="checkbox"/>	112 AIR ACTIVITIES	Indoor Air Quality	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	113 AIR ACTIVITIES	Indoor Air Quality	Development of Codes and Ordinances		
<input type="checkbox"/>	114 AIR ACTIVITIES	Indoor Air Quality	Development of Monitoring Capacity		
<input type="checkbox"/>	115 AIR ACTIVITIES	Indoor Air Quality	Development of QAPPs		
<input type="checkbox"/>	385 AIR ACTIVITIES	Indoor Air Quality	General Program Development		
<input type="checkbox"/>	116 AIR ACTIVITIES	Indoor Air Quality	Source Inventory		
<input type="checkbox"/>	117 AIR ACTIVITIES	Indoor Air Quality	Source Inventory-T14(9005)		
<input type="checkbox"/>	118 AIR ACTIVITIES	Indoor Air Quality	Staff Program Capacity Development		
<input type="checkbox"/>	GENERAL MANAGEMENT 236 AND ADMINISTRATION				
<input type="checkbox"/>	GENERAL MANAGEMENT 428 AND ADMINISTRATION	Communication			
<input type="checkbox"/>	GENERAL MANAGEMENT 421 AND ADMINISTRATION	Communication	External Communication (e.g., with regulated community or other governments)		
<input type="checkbox"/>	GENERAL MANAGEMENT 420 AND ADMINISTRATION	Communication	Internal Communication (e.g., with Tribal Executive, community, K-12, or adult education)		
<input type="checkbox"/>	GENERAL MANAGEMENT 382 AND ADMINISTRATION	Program Establishment Activities			
<input type="checkbox"/>	GENERAL MANAGEMENT 225 AND ADMINISTRATION	Program Establishment Activities	Baseline Environmental Assessment		

Tribe Name:		Grant Number(s):				
ACT_GPRA_I	CATEGORY	SUB1	SUB2	SUB3	Note	
<input type="checkbox"/>	GENERAL MANAGEMENT 228 AND ADMINISTRATION	Program Establishment Activities	Enforcement Capability			
<input type="checkbox"/>	GENERAL MANAGEMENT 229 AND ADMINISTRATION	Program Establishment Activities	Fiscal Administration Capacity	Standards in Place		
<input type="checkbox"/>	GENERAL MANAGEMENT 230 AND ADMINISTRATION	Program Establishment Activities	Fiscal Administration Capacity	Standards for Property Management		
<input type="checkbox"/>	GENERAL MANAGEMENT 231 AND ADMINISTRATION	Program Establishment Activities	Fiscal Administration Capacity	Standards for Procurement		
<input type="checkbox"/>	GENERAL MANAGEMENT 232 AND ADMINISTRATION	Program Establishment Activities	Legal Capability			
<input type="checkbox"/>	GENERAL MANAGEMENT 235 AND ADMINISTRATION	Staff				
<input type="checkbox"/>	GENERAL MANAGEMENT 233 AND ADMINISTRATION	Staff	Develop Position Descriptions			
<input type="checkbox"/>	GENERAL MANAGEMENT 234 AND ADMINISTRATION	Staff	Training Program			
<input type="checkbox"/>	436 GRANT WRITING					
<input type="checkbox"/>	429 GRANT WRITING	Clean Air Quality				
<input type="checkbox"/>	430 GRANT WRITING	Clean Water Activities				
<input type="checkbox"/>	431 GRANT WRITING	Cross Media Activities				
<input type="checkbox"/>	432 GRANT WRITING	Drinking Water Quality				
<input type="checkbox"/>	433 GRANT WRITING	General Management and Administration				
<input type="checkbox"/>	434 GRANT WRITING	Solid and Hazardous Waste Activities				
<input type="checkbox"/>	435 GRANT WRITING	Toxic Substances Activities				
<input type="checkbox"/>	381 LAND ACTIVITIES					
<input type="checkbox"/>	344 LAND ACTIVITIES	Asbestos				
<input type="checkbox"/>	333 LAND ACTIVITIES	Asbestos	Baseline Assessment (e.g., Lead Sources Inventory, Blood Lead Survey, Field PoPs Survey, or Building Condition Survey)			
<input type="checkbox"/>	339 LAND ACTIVITIES	Asbestos	Developing Permitting/Licensing Authority			
<input type="checkbox"/>	338 LAND ACTIVITIES	Asbestos	Development of a Database			
<input type="checkbox"/>	340 LAND ACTIVITIES	Asbestos	Development of Monitoring Capacity			
<input type="checkbox"/>	341 LAND ACTIVITIES	Asbestos	Development of QAPPs			
<input type="checkbox"/>	391 LAND ACTIVITIES	Asbestos	General Program Development			
<input type="checkbox"/>	342 LAND ACTIVITIES	Asbestos	Grant Administration			
<input type="checkbox"/>						

Tribe Name:		Grant Number(s):			
ACT_GPRA_I	CATEGORY	SUB1	SUB2	SUB3	Note
<input type="checkbox"/>	252 LAND ACTIVITIES	Emergency Response			
<input type="checkbox"/>			Baseline Assessment (e.g., Sources Inventory, Superfund Site Identification, Site Evaluation, Site Development, Remediation, and Waste Stream Characterization)		
<input type="checkbox"/>	237 LAND ACTIVITIES	Emergency Response			
<input type="checkbox"/>	247 LAND ACTIVITIES	Emergency Response		Developing Permitting/Licensing Authority	
<input type="checkbox"/>	246 LAND ACTIVITIES	Emergency Response		Development of a Database	
<input type="checkbox"/>				Development of Monitoring Capacity	
<input type="checkbox"/>	248 LAND ACTIVITIES	Emergency Response			
<input type="checkbox"/>	249 LAND ACTIVITIES	Emergency Response		Development of QAPPs	
<input type="checkbox"/>	395 LAND ACTIVITIES	Emergency Response		General Program Development	
<input type="checkbox"/>	250 LAND ACTIVITIES	Emergency Response		Grant Administration	
<input type="checkbox"/>				Staff Program Capacity Development	
<input type="checkbox"/>	251 LAND ACTIVITIES	Emergency Response			
<input type="checkbox"/>	268 LAND ACTIVITIES	Hazardous Waste			
<input type="checkbox"/>			Baseline Assessment (e.g., Sources Inventory, Superfund Site Identification, Site Evaluation, Site Development, Remediation, and Waste Stream Characterization)		
<input type="checkbox"/>	253 LAND ACTIVITIES	Hazardous Waste			
<input type="checkbox"/>				Developing Permitting/Licensing Authority	
<input type="checkbox"/>	263 LAND ACTIVITIES	Hazardous Waste			
<input type="checkbox"/>	262 LAND ACTIVITIES	Hazardous Waste		Development of a Database	
<input type="checkbox"/>				Development of Monitoring Capacity	
<input type="checkbox"/>	264 LAND ACTIVITIES	Hazardous Waste			
<input type="checkbox"/>	265 LAND ACTIVITIES	Hazardous Waste		Development of QAPPs	
<input type="checkbox"/>	396 LAND ACTIVITIES	Hazardous Waste		General Program Development	
<input type="checkbox"/>	266 LAND ACTIVITIES	Hazardous Waste		Grant Administration	
<input type="checkbox"/>				Staff Program Capacity Development	
<input type="checkbox"/>	267 LAND ACTIVITIES	Hazardous Waste			
<input type="checkbox"/>	356 LAND ACTIVITIES	Lead			
<input type="checkbox"/>			Baseline Assessment (e.g., Lead Sources Inventory, Blood Lead Survey, Field PoPs Survey, or Building Condition Survey)		
<input type="checkbox"/>	345 LAND ACTIVITIES	Lead			
<input type="checkbox"/>				Developing Permitting/Licensing Authority	
<input type="checkbox"/>	351 LAND ACTIVITIES	Lead			
<input type="checkbox"/>	350 LAND ACTIVITIES	Lead		Development of a Database	
<input type="checkbox"/>				Development of Monitoring Capacity	
<input type="checkbox"/>	352 LAND ACTIVITIES	Lead			
<input type="checkbox"/>	353 LAND ACTIVITIES	Lead		Development of QAPPs	
<input type="checkbox"/>	392 LAND ACTIVITIES	Lead		General Program Development	

<i>Tribe Name:</i>		<i>Grant Number(s):</i>			
<i>ACT_GPRA_I</i>	<i>CATEGORY</i>	<i>SUB1</i>	<i>SUB2</i>	<i>SUB3</i>	<i>Note</i>
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>	355 LAND ACTIVITIES	Lead			Staff Program Capacity Development
<input type="checkbox"/>	368 LAND ACTIVITIES	Pesticides			
<input type="checkbox"/>					
<input type="checkbox"/>	357 LAND ACTIVITIES	Pesticides			Baseline Assessment (e.g., Lead Sources Inventory, Blood Lead Survey, Field PoPs Survey, or Building Condition Survey)
<input type="checkbox"/>	363 LAND ACTIVITIES	Pesticides			Developing Permitting/Licensing Authority
<input type="checkbox"/>	362 LAND ACTIVITIES	Pesticides			Development of a Database
<input type="checkbox"/>					Development of Monitoring Capacity
<input type="checkbox"/>	364 LAND ACTIVITIES	Pesticides			Development of QAPPs
<input type="checkbox"/>	365 LAND ACTIVITIES	Pesticides			General Program Development
<input type="checkbox"/>	393 LAND ACTIVITIES	Pesticides			Grant Administration
<input type="checkbox"/>	366 LAND ACTIVITIES	Pesticides			Staff Program Capacity Development
<input type="checkbox"/>	367 LAND ACTIVITIES	Pesticides			
<input type="checkbox"/>	380 LAND ACTIVITIES	PoPs (PCBs, Mercury)			
<input type="checkbox"/>					
<input type="checkbox"/>	369 LAND ACTIVITIES	PoPs (PCBs, Mercury)			Baseline Assessment (e.g., Lead Sources Inventory, Blood Lead Survey, Field PoPs Survey, or Building Condition Survey)
<input type="checkbox"/>					Developing Permitting/Licensing Authority
<input type="checkbox"/>	375 LAND ACTIVITIES	PoPs (PCBs, Mercury)			Development of a Database
<input type="checkbox"/>	374 LAND ACTIVITIES	PoPs (PCBs, Mercury)			Development of Monitoring Capacity
<input type="checkbox"/>					Development of QAPPs
<input type="checkbox"/>	376 LAND ACTIVITIES	PoPs (PCBs, Mercury)			General Program Development
<input type="checkbox"/>	377 LAND ACTIVITIES	PoPs (PCBs, Mercury)			Grant Administration
<input type="checkbox"/>	394 LAND ACTIVITIES	PoPs (PCBs, Mercury)			Staff Program Capacity Development
<input type="checkbox"/>	378 LAND ACTIVITIES	PoPs (PCBs, Mercury)			
<input type="checkbox"/>					
<input type="checkbox"/>	379 LAND ACTIVITIES	PoPs (PCBs, Mercury)			
<input type="checkbox"/>	284 LAND ACTIVITIES	Recycling			
<input type="checkbox"/>					
<input type="checkbox"/>					Baseline Assessment (e.g., Sources Inventory, Superfund Site Identification, Site Evaluation, Site Development, Remediation, and Waste Stream Characterization)
<input type="checkbox"/>	269 LAND ACTIVITIES	Recycling			Developing Permitting/Licensing Authority
<input type="checkbox"/>	279 LAND ACTIVITIES	Recycling			Development of a Database
<input type="checkbox"/>	278 LAND ACTIVITIES	Recycling			
<input type="checkbox"/>					

<i>Tribe Name:</i>		<i>Grant Number(s):</i>			
<i>ACT_GPRA_I</i>	<i>CATEGORY</i>	<i>SUB1</i>	<i>SUB2</i>	<i>SUB3</i>	<i>Note</i>
<input type="checkbox"/>	281 LAND ACTIVITIES	Recycling	Development of QAPPs		
<input type="checkbox"/>	397 LAND ACTIVITIES	Recycling	General Program Development		
<input type="checkbox"/>	282 LAND ACTIVITIES	Recycling	Grant Administration		
<input type="checkbox"/>			Staff Program Capacity		
	283 LAND ACTIVITIES	Recycling	Development		
<input type="checkbox"/>	300 LAND ACTIVITIES	Solid Waste			
<input type="checkbox"/>			Baseline Assessment (e.g., Sources Inventory, Superfund Site Identification, Site Evaluation, Site Development, Remediation, and Waste Stream Characterization)		
	285 LAND ACTIVITIES	Solid Waste	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	295 LAND ACTIVITIES	Solid Waste	Development of a Database		
<input type="checkbox"/>	294 LAND ACTIVITIES	Solid Waste	Development of Monitoring Capacity		
<input type="checkbox"/>	296 LAND ACTIVITIES	Solid Waste	Development of QAPPs		
<input type="checkbox"/>	297 LAND ACTIVITIES	Solid Waste	General Program Development		
<input type="checkbox"/>	398 LAND ACTIVITIES	Solid Waste	Grant Administration		
<input type="checkbox"/>	298 LAND ACTIVITIES	Solid Waste	Staff Program Capacity		
<input type="checkbox"/>			Development		
<input type="checkbox"/>	299 LAND ACTIVITIES	Solid Waste			
<input type="checkbox"/>	316 LAND ACTIVITIES	Superfund			
<input type="checkbox"/>			Baseline Assessment (e.g., Sources Inventory, Superfund Site Identification, Site Evaluation, Site Development, Remediation, and Waste Stream Characterization)		
	301 LAND ACTIVITIES	Superfund	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	311 LAND ACTIVITIES	Superfund	Development of a Database		
<input type="checkbox"/>	310 LAND ACTIVITIES	Superfund	Development of Monitoring Capacity		
<input type="checkbox"/>	312 LAND ACTIVITIES	Superfund	Development of QAPPs		
<input type="checkbox"/>	313 LAND ACTIVITIES	Superfund	General Program Development		
<input type="checkbox"/>	399 LAND ACTIVITIES	Superfund	Grant Administration		
<input type="checkbox"/>	314 LAND ACTIVITIES	Superfund	Staff Program Capacity		
<input type="checkbox"/>			Development		
<input type="checkbox"/>	315 LAND ACTIVITIES	Superfund			
<input type="checkbox"/>	332 LAND ACTIVITIES	UST			
<input type="checkbox"/>					

<i>Tribe Name:</i>		<i>Grant Number(s):</i>			
<i>ACT_GPRA_I</i>	<i>CATEGORY</i>	<i>SUB1</i>	<i>SUB2</i>	<i>SUB3</i>	<i>Note</i>
<input type="checkbox"/>	327 LAND ACTIVITIES	UST	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	326 LAND ACTIVITIES	UST	Development of a Database		
<input type="checkbox"/>	328 LAND ACTIVITIES	UST	Development of Monitoring Capacity		
<input type="checkbox"/>	329 LAND ACTIVITIES	UST	Development of QAPPs		
<input type="checkbox"/>	400 LAND ACTIVITIES	UST	General Program Development		
<input type="checkbox"/>	330 LAND ACTIVITIES	UST	Grant Administration		
<input type="checkbox"/>	331 LAND ACTIVITIES	UST	Staff Program Capacity Development		
<input type="checkbox"/>	SPECIAL EMPHASIS 205 ACTIVITIES				
<input type="checkbox"/>	SPECIAL EMPHASIS 164 ACTIVITIES	Endangered Species			
<input type="checkbox"/>	SPECIAL EMPHASIS 155 ACTIVITIES	Endangered Species	Baseline Assessment (e.g., Sources Inventory, Survey)		
<input type="checkbox"/>	SPECIAL EMPHASIS 158 ACTIVITIES	Endangered Species	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	SPECIAL EMPHASIS 159 ACTIVITIES	Endangered Species	Development of Codes and Ordinances		
<input type="checkbox"/>	SPECIAL EMPHASIS 160 ACTIVITIES	Endangered Species	Development of Monitoring Capacity		
<input type="checkbox"/>	SPECIAL EMPHASIS 161 ACTIVITIES	Endangered Species	Development of QAPPs		
<input type="checkbox"/>	SPECIAL EMPHASIS 162 ACTIVITIES	Endangered Species	Grants Administration		
<input type="checkbox"/>	SPECIAL EMPHASIS 163 ACTIVITIES	Endangered Species	Wetland Identification and Delineation		
<input type="checkbox"/>	SPECIAL EMPHASIS 174 ACTIVITIES	Environmental Justice			
<input type="checkbox"/>	SPECIAL EMPHASIS 165 ACTIVITIES	Environmental Justice	Baseline Assessment (e.g., Sources Inventory, Survey)		
<input type="checkbox"/>	SPECIAL EMPHASIS 168 ACTIVITIES	Environmental Justice	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	SPECIAL EMPHASIS 169 ACTIVITIES	Environmental Justice	Development of Codes and Ordinances		
<input type="checkbox"/>	SPECIAL EMPHASIS 170 ACTIVITIES	Environmental Justice	Development of Monitoring Capacity		
<input type="checkbox"/>	SPECIAL EMPHASIS 171 ACTIVITIES	Environmental Justice	Development of QAPPs		
<input type="checkbox"/>	SPECIAL EMPHASIS 172 ACTIVITIES	Environmental Justice	Grants Administration		
<input type="checkbox"/>	SPECIAL EMPHASIS 173 ACTIVITIES	Environmental Justice	Wetland Identification and Delineation		
<input type="checkbox"/>	SPECIAL EMPHASIS 184 ACTIVITIES	NEPA/TEPA/Cultural Resources			

Tribe Name:		Grant Number(s):			
ACT_GPRA_I	CATEGORY	SUB1	SUB2	SUB3	Note
<input type="checkbox"/>					
<input type="checkbox"/>	SPECIAL EMPHASIS 178 ACTIVITIES	NEPA/TEPA/Cultural Resources	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	SPECIAL EMPHASIS 179 ACTIVITIES	NEPA/TEPA/Cultural Resources	Development of Codes and Ordinances		
<input type="checkbox"/>	SPECIAL EMPHASIS 180 ACTIVITIES	NEPA/TEPA/Cultural Resources	Development of Monitoring Capacity		
<input type="checkbox"/>	SPECIAL EMPHASIS 181 ACTIVITIES	NEPA/TEPA/Cultural Resources	Development of QAPPs		
<input type="checkbox"/>	SPECIAL EMPHASIS 182 ACTIVITIES	NEPA/TEPA/Cultural Resources	Grants Administration		
<input type="checkbox"/>	SPECIAL EMPHASIS 183 ACTIVITIES	NEPA/TEPA/Cultural Resources	Wetland Identification and Delineation		
<input type="checkbox"/>	SPECIAL EMPHASIS 194 ACTIVITIES	Pollution Prevention			
<input type="checkbox"/>	SPECIAL EMPHASIS 185 ACTIVITIES	Pollution Prevention	Baseline Assessment (e.g., Sources Inventory, Survey)		
<input type="checkbox"/>	SPECIAL EMPHASIS 188 ACTIVITIES	Pollution Prevention	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	SPECIAL EMPHASIS 189 ACTIVITIES	Pollution Prevention	Development of Codes and Ordinances		
<input type="checkbox"/>	SPECIAL EMPHASIS 190 ACTIVITIES	Pollution Prevention	Development of Monitoring Capacity		
<input type="checkbox"/>	SPECIAL EMPHASIS 191 ACTIVITIES	Pollution Prevention	Development of QAPPs		
<input type="checkbox"/>	SPECIAL EMPHASIS 192 ACTIVITIES	Pollution Prevention	Grants Administration		
<input type="checkbox"/>	SPECIAL EMPHASIS 193 ACTIVITIES	Pollution Prevention	Wetland Identification and Delineation		
<input type="checkbox"/>	SPECIAL EMPHASIS 204 ACTIVITIES	Sustainable Development			
<input type="checkbox"/>	SPECIAL EMPHASIS 195 ACTIVITIES	Sustainable Development	Baseline Assessment (e.g., Sources Inventory, Survey)		
<input type="checkbox"/>	SPECIAL EMPHASIS 198 ACTIVITIES	Sustainable Development	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	SPECIAL EMPHASIS 199 ACTIVITIES	Sustainable Development	Development of Codes and Ordinances		
<input type="checkbox"/>	SPECIAL EMPHASIS 200 ACTIVITIES	Sustainable Development	Development of Monitoring Capacity		
<input type="checkbox"/>	SPECIAL EMPHASIS 201 ACTIVITIES	Sustainable Development	Development of QAPPs		
<input type="checkbox"/>	SPECIAL EMPHASIS 202 ACTIVITIES	Sustainable Development	Grants Administration		
<input type="checkbox"/>	SPECIAL EMPHASIS 203 ACTIVITIES	Sustainable Development	Wetland Identification and Delineation		
<input type="checkbox"/>	154 WATER ACTIVITIES				

<i>Tribe Name:</i>	<i>ACT_GPRA_I</i>	<i>CATEGORY</i>	<i>SUB1</i>	<i>Grant Number(s):</i>	<i>SUB2</i>	<i>SUB3</i>	<i>Note</i>
<input type="checkbox"/>							
<input type="checkbox"/>	401	WATER ACTIVITIES	Ground Water				
<input type="checkbox"/>	403	WATER ACTIVITIES	Ground Water	Administering EPA Grant			
<input type="checkbox"/>	404	WATER ACTIVITIES	Ground Water	Baseline Assessment			
<input type="checkbox"/>				Developing Water Quality			
<input type="checkbox"/>	406	WATER ACTIVITIES	Ground Water	Standards			
<input type="checkbox"/>				Development of Codes and			
<input type="checkbox"/>	407	WATER ACTIVITIES	Ground Water	Ordinances			
<input type="checkbox"/>				Development of Monitoring			
<input type="checkbox"/>	408	WATER ACTIVITIES	Ground Water	Capacity			
<input type="checkbox"/>	409	WATER ACTIVITIES	Ground Water	Development of QAPPs			
<input type="checkbox"/>	405	WATER ACTIVITIES	Ground Water	General Program Development			
<input type="checkbox"/>				Staff Program Capacity			
<input type="checkbox"/>				Development			
<input type="checkbox"/>	410	WATER ACTIVITIES	Ground Water				
<input type="checkbox"/>	131	WATER ACTIVITIES	Non-Point Sources				
<input type="checkbox"/>	121	WATER ACTIVITIES	Non-Point Sources	Administering EPA Grant			
<input type="checkbox"/>				Baseline Assessment (e.g., NPS			
<input type="checkbox"/>				Source Inventory, Watershed			
<input type="checkbox"/>	122	WATER ACTIVITIES	Non-Point Sources	Inventory)			
<input type="checkbox"/>				Developing Water Quality			
<input type="checkbox"/>	126	WATER ACTIVITIES	Non-Point Sources	Standards			
<input type="checkbox"/>				Development of Codes and			
<input type="checkbox"/>	127	WATER ACTIVITIES	Non-Point Sources	Ordinances			
<input type="checkbox"/>				Development of Monitoring			
<input type="checkbox"/>	128	WATER ACTIVITIES	Non-Point Sources	Capacity			
<input type="checkbox"/>	129	WATER ACTIVITIES	Non-Point Sources	Development of QAPPs			
<input type="checkbox"/>	386	WATER ACTIVITIES	Non-Point Sources	General Program Development			
<input type="checkbox"/>				Staff Program Capacity			
<input type="checkbox"/>				Development			
<input type="checkbox"/>	130	WATER ACTIVITIES	Non-Point Sources				
<input type="checkbox"/>	402	WATER ACTIVITIES	Point Sources				
<input type="checkbox"/>	412	WATER ACTIVITIES	Point Sources	Administering EPA Grant			
<input type="checkbox"/>	413	WATER ACTIVITIES	Point Sources	Baseline Assessment			
<input type="checkbox"/>				Developing Water Quality			
<input type="checkbox"/>	415	WATER ACTIVITIES	Point Sources	Standards			
<input type="checkbox"/>				Development of Codes and			
<input type="checkbox"/>	416	WATER ACTIVITIES	Point Sources	Ordinances			
<input type="checkbox"/>				Development of Monitoring			
<input type="checkbox"/>	417	WATER ACTIVITIES	Point Sources	Capacity			
<input type="checkbox"/>	418	WATER ACTIVITIES	Point Sources	Development of QAPPs			
<input type="checkbox"/>	414	WATER ACTIVITIES	Point Sources	General Program Development			
<input type="checkbox"/>				Staff Program Capacity			
<input type="checkbox"/>				Development			
<input type="checkbox"/>	419	WATER ACTIVITIES	Point Sources				
<input type="checkbox"/>	214	WATER ACTIVITIES	Source Water Protection				
<input type="checkbox"/>				Developing Permitting/Licensing			
<input type="checkbox"/>	206	WATER ACTIVITIES	Source Water Protection	Authority			
<input type="checkbox"/>							

Tribe Name:		Grant Number(s):			
ACT_GPRA_I	CATEGORY	SUB1	SUB2	SUB3	Note
<input type="checkbox"/>	208 WATER ACTIVITIES	Source Water Protection	Development of Monitoring Capacity		
<input type="checkbox"/>	209 WATER ACTIVITIES	Source Water Protection	Development of QAPPs		
<input type="checkbox"/>	389 WATER ACTIVITIES	Source Water Protection	General Program Development		
<input type="checkbox"/>	210 WATER ACTIVITIES	Source Water Protection	Grants Administration		
<input type="checkbox"/>	211 WATER ACTIVITIES	Source Water Protection	Source Water Inventory		
<input type="checkbox"/>	212 WATER ACTIVITIES	Source Water Protection	Staff Program Capacity Development		
<input type="checkbox"/>	213 WATER ACTIVITIES	Source Water Protection	Wetland Identification and Delineation. NOT IN USE. PLEASE RECLASSIFY		
<input type="checkbox"/>	223 WATER ACTIVITIES	Underground Injection Control			
<input type="checkbox"/>	215 WATER ACTIVITIES	Underground Injection Control	Developing Permitting/Licensing Authority		
<input type="checkbox"/>	216 WATER ACTIVITIES	Underground Injection Control	Development of Codes and Ordinances		
<input type="checkbox"/>	217 WATER ACTIVITIES	Underground Injection Control	Development of Monitoring Capacity		
<input type="checkbox"/>	218 WATER ACTIVITIES	Underground Injection Control	Development of QAPPs		
<input type="checkbox"/>	390 WATER ACTIVITIES	Underground Injection Control	General Program Development		
<input type="checkbox"/>	219 WATER ACTIVITIES	Underground Injection Control	Grants Administration		
<input type="checkbox"/>	220 WATER ACTIVITIES	Underground Injection Control	Source Water Inventory		
<input type="checkbox"/>	221 WATER ACTIVITIES	Underground Injection Control	Staff Program Capacity Development		
<input type="checkbox"/>	222 WATER ACTIVITIES	Underground Injection Control	Wetland Identification and Delineation. NOT IN USE. PLEASE RECLASSIFY		
<input type="checkbox"/>	142 WATER ACTIVITIES	Watershed			
<input type="checkbox"/>	132 WATER ACTIVITIES	Watershed	Administering EPA Grant		
<input type="checkbox"/>	133 WATER ACTIVITIES	Watershed	Baseline Assessment (e.g., NPS Source Inventory, Watershed Inventory)		
<input type="checkbox"/>	137 WATER ACTIVITIES	Watershed	Developing Water Quality Standards		
<input type="checkbox"/>	138 WATER ACTIVITIES	Watershed	Development of Codes and Ordinances		
<input type="checkbox"/>	139 WATER ACTIVITIES	Watershed	Development of Monitoring Capacity		
<input type="checkbox"/>	140 WATER ACTIVITIES	Watershed	Development of QAPPs		
<input type="checkbox"/>	387 WATER ACTIVITIES	Watershed	General Program Development		
<input type="checkbox"/>	141 WATER ACTIVITIES	Watershed	Staff Program Capacity Development		
<input type="checkbox"/>	153 WATER ACTIVITIES	Wetlands			
<input type="checkbox"/>	143 WATER ACTIVITIES	Wetlands	Administering EPA Grant		
<input type="checkbox"/>	144 WATER ACTIVITIES	Wetlands	Baseline Assessment (e.g., NPS Source Inventory, Watershed Inventory)		

<i>Tribe Name:</i>		<i>Grant Number(s):</i>				
<i>ACT_GPRA_I</i>	<i>CATEGORY</i>	<i>SUB1</i>	<i>SUB2</i>	<i>SUB3</i>	<i>Note</i>	
<input type="checkbox"/>						
<input type="checkbox"/>	149 WATER ACTIVITIES	Wetlands			Development of Codes and Ordinances	
<input type="checkbox"/>	150 WATER ACTIVITIES	Wetlands			Development of Monitoring Capacity	
<input type="checkbox"/>	151 WATER ACTIVITIES	Wetlands			Development of QAPPs	
<input type="checkbox"/>	388 WATER ACTIVITIES	Wetlands			General Program Development	
<input type="checkbox"/>	152 WATER ACTIVITIES	Wetlands			Staff Program Capacity Development	

Appendix F

TRIBAL POPULATION STATISTICS

APPENDIX F: POPULATION INFERENCES BASED ON SAMPLE DATA

Exhibit 1 below shows confidence intervals for the population proportions of various indicators.

Exhibit 1: Summary of Population Proportions				
Indicator^(a)	Sample Proportion	Sample Size^(b)	95 Percent Confidence Interval	
			Low	High
Percent of tribes that participated in activities to increase legal capacity	25%	96	16%	34%
Percent of tribes that developed codes, ordinances, or standards	26%	96	17%	35%
Percent of tribes that adopted/implemented codes, ordinances, or standards	7%	96	2%	12%
Percent of tribes that participated in enforcement activities	26%	96	17%	35%
Percent of tribes that have at least one professional staff member	90%	96	83%	96%
Percent of tribes participating in water activities	73%	96	64%	82%
Percent of tribes participating in waste activities	73%	96	64%	82%
Percent of tribes participating in air activities	49%	96	39%	59%
Percent of tribes participating in internal communication activities	71%	96	62%	80%
Percent of tribes participating in external communication activities	69%	96	59%	78%
Percent of tribes participating in general communication activities	29%	96	20%	38%
Percent of tribes that took advantage of technical resources	76%	96	68%	85%
Percent of tribes that took advantage of programmatic resources	23%	96	15%	31%
Percent of non-GAP grants received concurrently with GAP funding	90%	1242 ^(c)	88%	91%
Percent of tribes receiving non-GAP funding	62%	111	53%	71%

(a) We could not calculate population proportions for the percentage of tribes with unfavorable audit results, because results do not meet the criteria of approximately normal distribution.

(b) Unless otherwise noted, sample size refers to the number of tribes.

(c) In this case, sample size refers to number of grants, rather than number of tribes.

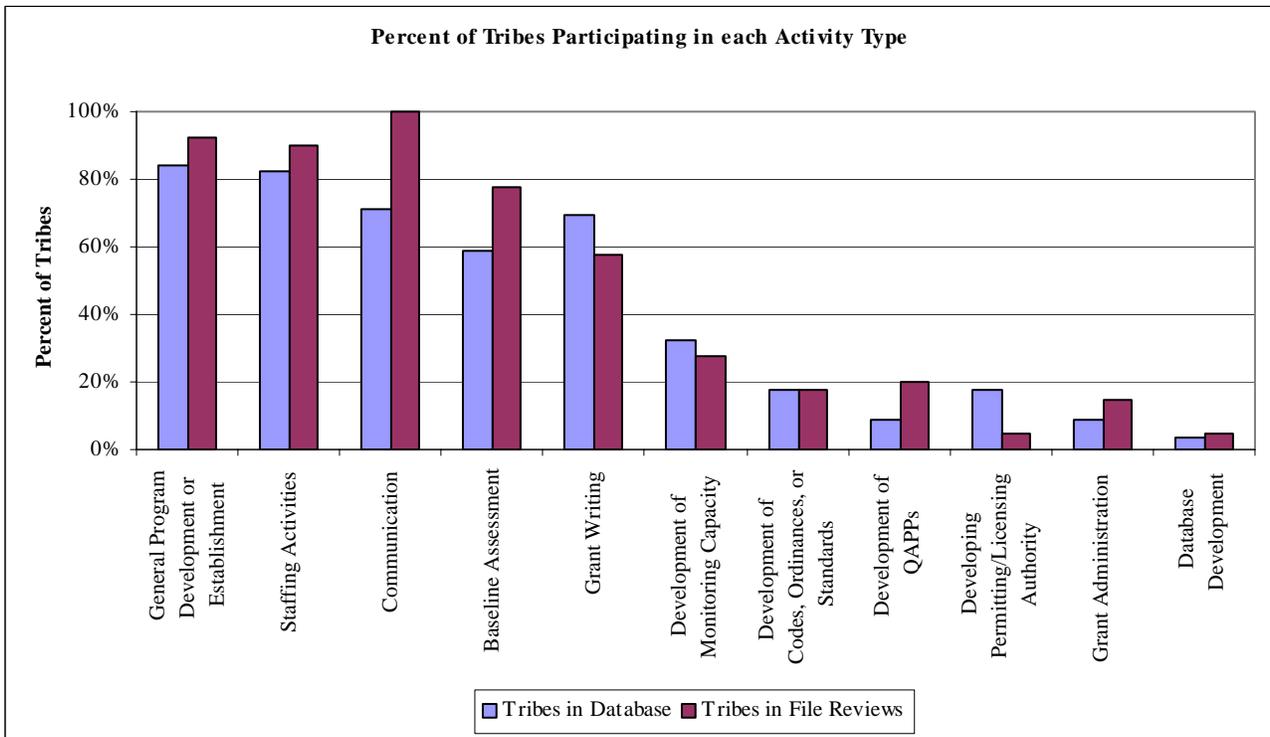
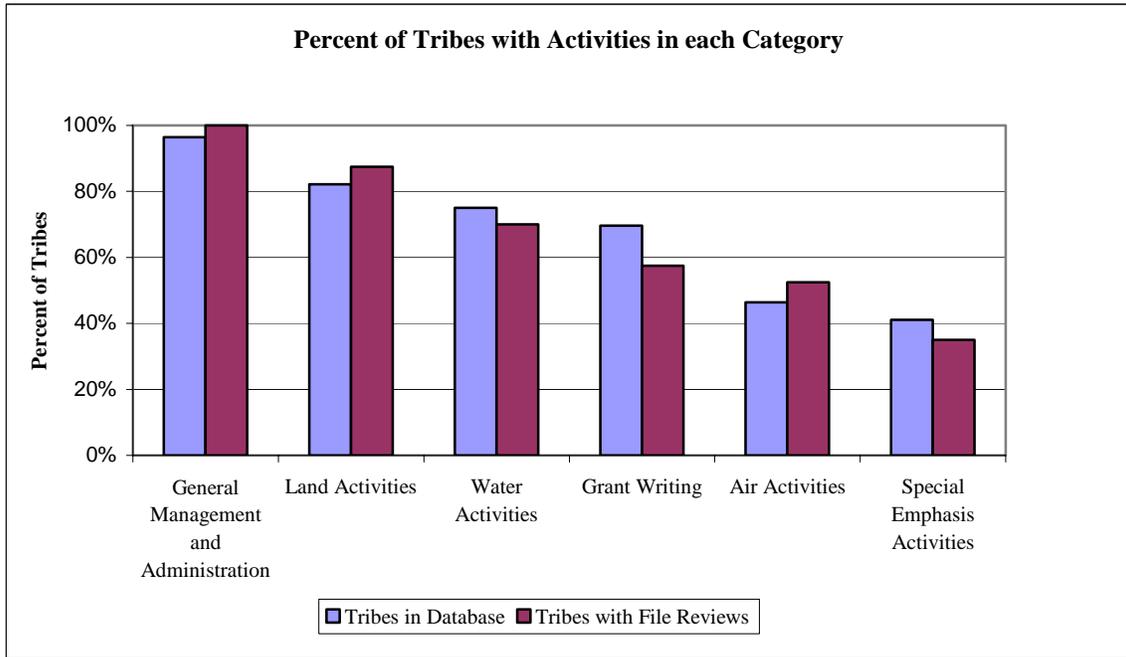
Exhibit 2 below shows confidence intervals for the population means for various indicators.

Exhibit 2: Summary of Population Means				
Indicator	Sample Mean	Sample Size^(a)	95 Percent Confidence Interval	
			Low	High
Amount of GAP grant	\$102,472	754	\$ 97,957	\$106,986
Number of technical resources accessed	4.4	96	3.4	5.3
Number of programmatic resources accessed	1.2	40	0.8	1.6
Number of months between project end and closeout date	12.7	175 ^(b)	11.4	14.0
Number of professional and technical FTEs hired	1.2	66	1.1	1.4
(a) Unless otherwise noted, sample size refers to the number of tribes.				
(b) In this case, sample size refers to number of grants, rather than number of tribes.				

Appendix G

ACTIVITY COMPARISON ACROSS TRIBE SAMPLE GROUPS

Appendix G



Appendix H

REGIONAL GAP PROJECT OFFICERS INTERVIEWED

Appendix H

INTERVIEWEES: REGIONAL PROJECT OFFICERS FOR GAP	
EPA Region	Primary Interviewee
Region 1	Jean Crocker
Region 2	Christine Yost
Region 4	Cynthia Nolan
Region 5	Michael Nishi
Region 6	Dale Roy
Region 7	Wolfgang Brandner
Region 8	Judith Hervig (not completed)
Region 9	Timothy Wilhite
Region 10	Alan Moomaw
Cross-Region/Region 4	Dan Olone

Appendix I

TRIBES PARTICIPATING IN PANEL DISCUSSIONS

Appendix I

United South and Eastern Tribes (USET) 2007 Impact Week Meeting, Arlington, VA¹

- Miccosukee Tribe of Indians of Florida (Panelist)
- Poarch Band of Creek Indians of Alabama (Panelist)
- Narragansett Indian Tribe of Rhode Island (Panelist)

EPA Region 5 2007 Indian GAP Conference Week, Chicago, IL

- Forest County Potawatomi Community, Wisconsin (Panelist)
- Little Traverse Bay Bands of Odawa Indians, Michigan (Panelist)
- Grand Traverse Band of Ottawa and Chippewa Indians, Michigan
- Huron Potawatomi, Inc., Michigan
- Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin (Panelist)
- Leech Lake Band of Minnesota Chippewa
- Little River Band of Ottawa Indians, Michigan
- Mille Lacs Band of Minnesota Chippewa DNR/E
- Pokagon Band of Potawatomi Indians, Michigan and Indiana
- Quinault Tribe of the Quinault Reservation, Washington
- Saginaw Chippewa Indian Tribe of Michigan

EPA Region 8 Tribal Operations Committee Meeting, Denver, CO

- Ute Mountain Tribe of the Ute Mountain Reservation, Colorado, New Mexico & Utah (Panelist)
- Turtle Mountain Band of Chippewa Indians of North Dakota (Panelist)
- Confederated Salish & Kootenai Tribes of the Flathead Reservation, Montana (Panelist)
- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Flandreau Santee Sioux Tribe of South Dakota
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana
- Shoshone Tribe of the Wind River Reservation, Wyoming
- Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota
- Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado
- Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota
- Ute Indian Tribe of the Uintah & Ouray Reservation, Utah

¹ Due to inclement weather, we were not able to conduct a panel discussion with tribes at this event. We instead conducted separate interviews with each of the tribal representatives on the panel.

Appendix J

SOURCES OF NON-GAP FUNDING AND PROGRAM SUPPORT

Appendix J

Sources of Non-GAP Funding and Program Support Received by Tribes
<p>EPA Programs</p> <ul style="list-style-type: none"> • Clean Water Act (CWA) Section 106 – water program infrastructure, staffing, water quality standards development, well-protection plans, water quality lab, and training. • CWA Section 106b (since cut) – wetland management planning • CWA Section 319 – non point source pollution, water quality standards development • Solid waste – solid waste planning, code development, staffing, recycling • Clean Air Act Section 103 – air program, mercury deposition • Resource Conservation and Recovery Act (RCRA) Support Agency Cooperative Agreement • Underground Storage Tanks (UST) and Underground Injection Control (UIC) – Direct Implementation Tribal Cooperative Agreement (DITCA) • Public Water Systems Safety (since cut) – water treatment/facilities • Brownfields • Pesticides • Asthma Program • Environmental Justice
<p>Non-EPA Agencies and Programs</p> <ul style="list-style-type: none"> • U.S. Natural Resources Conservation Service (NRCS) – sedimentation issues, road issues, technical data, forest management, erosion control, soil protection • U.S. Department of Agriculture (USDA) (Rural development) – solid waste programs, equipment, buildings • U.S. Fish and Wildlife Service (FWS) – technical assistance, travel funding, forestry, water testing, burning, wildlife habitat • U.S. Bureau of Indian Affairs (BIA) – surface water cleaning, land resources, water resources, fish and wildlife compliance, land use enforcement, forestry, road maintenance, parks, wetlands permits • U.S. Bureau of Reclamation (BOR) – water activities; septic issues • U.S. Indian Health Service (IHS) – solid waste programs, equipment, buildings • U.S. Department of Health and Human Services (DHHS) – Administration for Native Americans (ANA) • U.S. Army Corps of Engineers – land use/wetlands permitting • State entities – WI Department of Natural Resources • Non-profits – National Groundwater Assn., North American Waste Management Society, Tip-of-the-Mitt Watershed Council, WI Assn. Of Lakes, Little Traverse Bay Organization, West Virginia University