

**Arizona Department of Environmental Quality  
Arizona Comparative Environmental Risk Project**

**PUBLIC VALUES ASSESSMENT**

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## Introduction

The following report details the results of the Public Values Assessment component of the Arizona Comparative Environmental Risk Project (ACERP). It examines the environmental values, environmental concerns, and environmental policy preferences of Arizona citizens as identified through a two-phase investigation that combined qualitative focus-group research with a state-wide quantitative survey of a representative sample of Arizonans.

The findings reported here are an effort to develop a portrait of how Arizonans from different parts of the state, and from different walks of life, approach environmental issues and the various policy options surrounding those issues in the mid-1990s. As one segment of the Arizona Comparative Environmental Risk Project, the public values research reported here was shaped by, and sought to address, the environmental "issues list" developed by the ACERP technical committees and the ACERP Public Advisory Committee.

As a research project the Public Values Assessment had four specific goals: (1) to identify underlying values that influence how individuals understand environmental issues, (2) gauge the level of concern regarding specific environmental issues, (3) identify how this concern might vary by such things as region of the state, age, income, occupation, and family status, and (4) assess the public attitudes towards various approaches to environmental policy. The purpose for gathering these data were to assist the ACERP committees in understanding the various clusters of public sentiment regarding environmental issues and responses to them, and to provide a better overall understanding of the public climate within which environmental issues are debated, and policy solutions derived in Arizona.

## Overall Method

The Public Values Assessment combined two research strategies, focus-group discussions and a state-wide survey to arrive at a more reliable understanding of public sentiment regarding environmental issues and policy. Focus groups bring together individuals, often with different viewpoints, and provide them a forum to discuss a *focused* series of questions or topics. As a research methodology focus groups have the advantage of providing a nuanced and in-depth picture of how people talk about issues, as compared to questionnaires which, of necessity, tend to frame questions more narrowly and rely on shorter responses. Focus groups, on the other hand, generally reach only small numbers of individuals. Thus, it is sometimes difficult to assess the degree to which the sentiments expressed within focus group discussions represent the wider population. Public opinion polls, on the other hand, can be directed to reliably representative samples of the population, and while the information they generate tends to have less depth than focus group discussion, they maximize the degree to which findings can be generalized from a small sample to the entire population.

One goal of the Public Values Assessment component of ACERP was to develop a representative, state-wide understanding of public sentiment regarding various environmental issues and policies. The other was to develop an in-depth understanding of how people think and talk about their views of the environment and its future. To achieve these somewhat contradictory goals the Public Values Assessment *linked* focus groups with a state-wide survey.

The focus group portion of the project began well before survey construction. This made it possible to take the preliminary findings from the focus groups and use these to build the public opinion questionnaire. This two-part strategy helped ensure that the questionnaire reflected key themes identified in the focus groups, and that the findings from the focus groups could be compared for representativeness against a state-wide sample of Arizonans.

The report that follows is divided into three main sections: (1) an executive summary of findings, (2) a report on the focus group findings, and (3) a report on the survey findings.

# ACERP PUBLIC VALUES ASSESSMENT

## Executive Summary of Key Findings

- A large majority of Arizonans (68%) identify the climate as the thing they like the most about living in Arizona.
- Two thirds of all Arizonans surveyed expressed "great concerned" with the quality of Arizona's environment.
- Women and those from lower income categories are somewhat more likely than men and those from upper income categories to express "great concern" with the quality of Arizona's environment.
- About one-third of those surveyed reported they felt the environment in Arizona was good for their health, and one third felt it was bad for their health.
- Older Arizonans over 60 were more likely to report the environment as good for their health than younger Arizonans in the 18 to 35 age group.
- Those living in the rural areas were far more likely to rate the environment positively than those living in cities.
- The availability and safety of drinking water ranked as the greatest concern among Arizonans surveyed.
- Outdoor air quality and the conditions of forests, deserts and other natural places were also areas of great concern to those survey.
- Nearly half (48%) of those surveyed felt the Arizona government overemphasized economic growth to the detriment of environmental protection, while 11% felt that environmental protection was overemphasized to the detriment of economic growth.
- A large majority (78%) agreed with the statement that industry should pay for the costs of environmental damage it causes.
- Two-thirds (67%) of the respondents said they would be willing to pay higher costs for goods and services to help pay for environmental protection.
- Just over half (52%) said they would be willing to pay higher taxes to cover the costs of environmental protection.
- When asked to allocate dollars to areas of environmental protection, respondents allocated the most to protecting water quality, with protecting air quality a close second.

# ACERP Project: Public Values Assessment

*Qualitative Research on Environmental Issues*

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## Qualitative Study Summary Findings

The focus group research conducted for the ACERP Project allowed individuals from all over Arizona to describe their concerns and beliefs about the environment in their own words. Nearly 100 individuals participated in 2 hour long focus group interviews. The interviews identified the parts of the Arizona environment that people believe to be the most important. The process allowed each individual to express their opinion about the quality of the Arizona environment, discuss the threats to the environment, identify who they felt is responsible for dealing with those threats, and discuss the actions that should be taken in the future. The following paragraphs summarize the focus group findings.

1. There were numerous comments about the role of the Federal Government in terms of where the responsibility for regulation and the responsibility to protect the environment should be placed. More than 90 percent of the participants took a moderate stance on this issue. These individuals felt that there needed to be a significant increase in local control, and local modification of regulations, to avoid impossible situations where the rules did not apply well to the local conditions. At the same time, these same individuals felt that some Federal regulation was necessary, especially in two areas. One was to deal with water, air quality, and land protection issues that cross state and international boundaries. The other was for areas in which local political or financial power blocks would cause environmental harm that local or state officials would be unwilling to deal with on a fair (non-discriminatory) basis. A small percentage of the discussants wanted increased federal regulation and enforcement of existing regulations, while an equally small percentage wanted no interference from anyone, from the Federal to the local level.
2. The need for increased local input and control was also discussed in relation to the state government. There were many comments that the environmental policy in Arizona is dominated by conditions that are most prevalent in Phoenix and Tucson, and that 95 percent of the land area of the state was either ignored, or inappropriately dealt with in terms of regulations based on an urban model. The view that the population and political dominance of Phoenix is harmful to the rest of the state was a common theme in the interviews. One individual summarized this issue when they compared the legislature and the state agencies dominance by "the State of Phoenix" as compared to the State of Arizona in commenting on the environmental needs for the state.
3. The interviews identified important regional differences in quality of life and the impact of the environment on peoples lives. Discussions in urban areas were predominantly about air and noise pollution and accidental poison discharges from industrial sites. The interviews in ranching and farming areas focused on water quality, pesticides, land management issues. The small town representatives discussed water availability, growth problems, access to recreation and cultural resources, and the political dominance of urban issues. The focus groups that investigated the border, migrant workers and Native American reservation issues identified serious problems with pollution from sources that were out of the control of local individuals and governments.
4. All of the groups were concerned with preserving the quality of life in Arizona, especially clean air threatened by local conditions (threatened by car exhaust, wood smoke, industrial pollution),

scenic beauty and access to public lands (threatened by both over population and by tourists), and water (threatened by over population, by chemical discharges, and by human waste).

5. Many of the specific environmental concerns that were discussed in the interviews tended to be localized and of the most interest to either a particular geographical area, or to a specific occupational or activity group. The endangered species regulations are a hot issue for some ranchers and farmers and for some organized environmentalist groups, but of little interest to many others. Pollution from Mexico and its terrible health consequences were important to the border groups, and uranium and other mining impacts on water were important on the Native American reservations. Destruction of archaeological sites and natural beauty were of most concern to individuals living near those resources. The discussion of these concerns pointed out that environmental policy is a balancing act. Most of the interviews indicated that there needed to be some flexibility and "give" from both sides of these special interest environmental problems. Both people and the environment need to be accommodated.

6. Education was the most frequently cited solution to growing environmental problems. This included educating consumers about ways of reducing pollution and environmental harm, educating businesses to reduce industrial pollution, educating the state agencies on local conditions that need to be taken into account in the fair application of regulations, and educating the state government (legislature and agencies) on the variety of environmental issues that exist in the state, beyond those most apparent in the urban areas.

## *Qualitative Research on Environmental Issues*

### *I. Background*

The Arizona Comparative Environmental Risk Project (ACERP) Public Values Assessment consists of two complimentary data collection and data analysis projects; one a qualitative investigation of values and attitudes towards environmental concerns in Arizona, in which we interviewed representative stakeholders in their home towns, and the other a representative survey of the entire state using a comprehensive environmental issues telephone interview. The qualitative project was designed to allow individuals in all parts of Arizona to provide information about their values and concerns about the environment, *in their own words*. The qualitative focus group questions allowed us to determine which areas of the environment are at issue to environmental stakeholders, to identify individuals beliefs about the risks that are associated with the environment, and allowed stakeholders to thoroughly discuss their views of who is responsible for correcting the problems found in these areas, without constraints on their answers,.

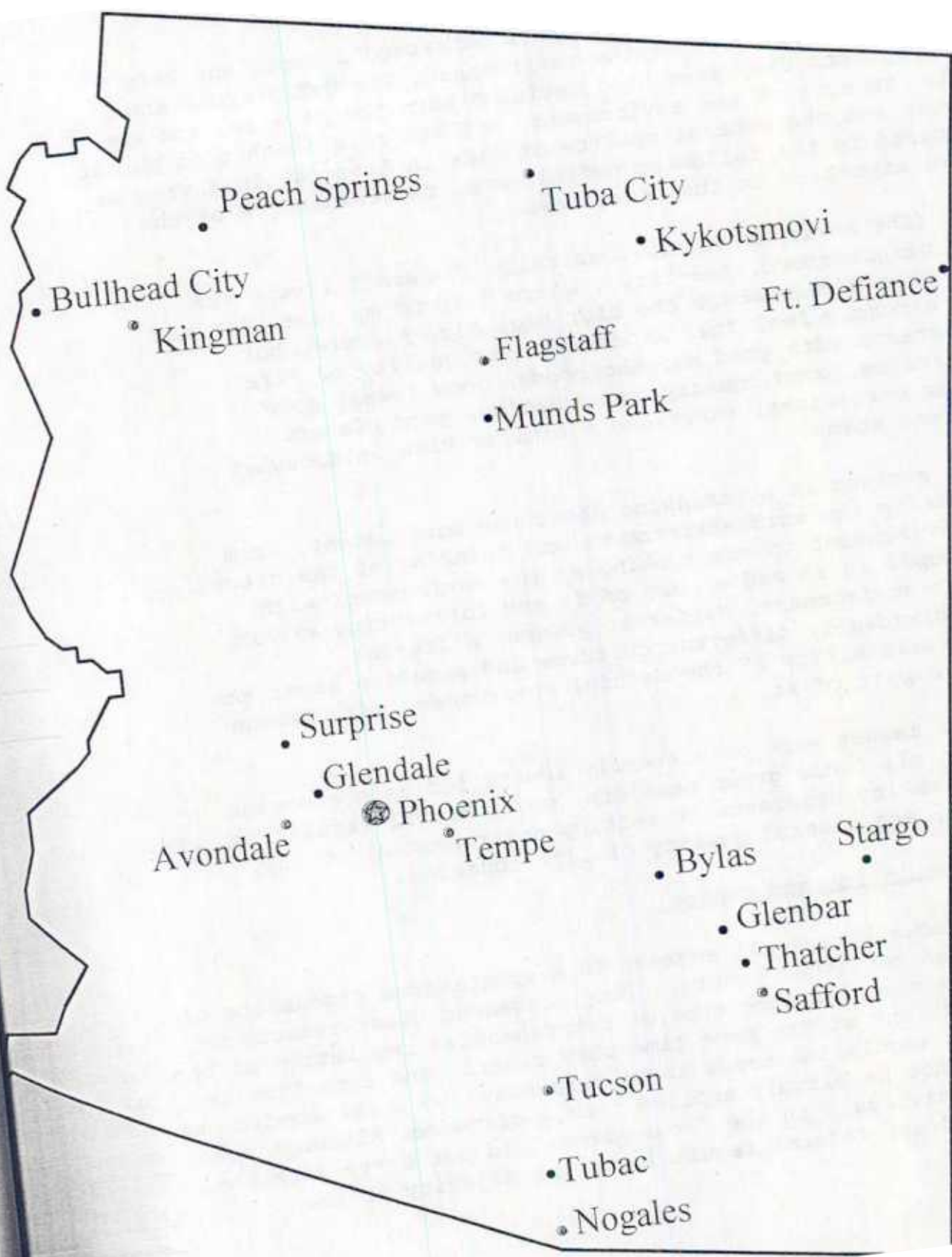
Approximately 100 people presented their viewpoints in focus group interviews. We attempted to include the broadest representation of different types of communities, including ranching, mining, farming, Native American, migrant labor, border-town, and urban communities. The location of the interviews ranged across northern, central and southern Arizona. We selected participants to be representative of the age, gender, occupational, educational and cultural diversity that is present in each location where the interviews were conducted. This provided us with both a diversity of viewpoints, and a way of assuring that all of the different voices on the environment had an opportunity to be heard.

The individuals who took part in the focus groups represent all facets of the community, from young to old, and across the

educational spectrum. They are appropriately representative of the cultural groups and types of occupations that were prominent in the community. These participants were nominated by ADEQ, by members of the ACERP Technical and Public Advisory Committees, and by local leaders (Chamber of Commerce, educational institutions, environmental groups, agricultural and industrial organizations, etc.). They represent a cross-section of the environmentally active parts of their community. Individuals who had no interest in the environment, or no knowledge about it were not selected. Those individuals are represented in the state wide telephone survey.

The primary objective of the qualitative research was to identify the issues about the environment that the state needs to take into account in relation to developing long range environmental policy. The focus groups provide this information in depth, while the survey provides it in a representative sample. The two types of data compliment each other. The responses obtained from the focus groups varied according to the community in which the research was conducted, since Arizona has a wide variety of environments and environmental concerns tied to the different regions and activities available in the state. At the same time, there were a number of state level issues that were identified in all of the interviews: concerns that cut across the state.

The first question that was explored by the qualitative research asked the participants to identify the areas of the environment which were important to the community. In all cases, the participants confirmed the importance of the basic environmental areas that are of interest to ADEQ, namely water availability and water quality, air quality, hazardous material threats to the environment, and quality of life (population pressures, threats to cultural heritage, the beauty and the variety of environments in Arizona). The importance of specific issues varied among the different communities represented in the interviews, depending on the physical aspects of the nearby environment, and the issues that were most important locally (population pressures and threats to local business were the most common local issues). However, there was also considerable consistency between each of the focus groups and the views in the other groups. These consistent responses are presented in the following section, as state wide issues on the environment.



• Peach Springs

• Tuba City

• Bullhead City

• Kykotsmovi

• Kingman

• Flagstaff

• Ft. Defiance

• Munds Park

• Surprise

• Glendale

• Phoenix

• Tempe

• Avondale

• Bylas

• Stargo

• Glenbar

• Thatcher

• Safford

• Tucson

• Tubac

• Nogales

II. STATE WIDE ISSUES

The focus group participants expressed a broad and very holistic description of the environment. The definitions and descriptions they presented included both the physical and the human aspects of the environment, and its relationship to public values and the general quality of life in Arizona. This view is captured in the following definitions. representative of the views expressed in the interviews.

*[The environment] is..basically , where I live. The neighborhood, the city,..where I spend my time, I'm not unconcerned about the big, big, big, picture, but I strongly feel that an environment quality of life starts with good neighborhoods, good towns, good states, good country, good nation, good planet.*

Another participant expressed a similar view in somewhat different words.

*I evolved in my thinking about the environment, from seeing the word environment and thinking of the natural environment to now looking at the environment with people in it and a part of it and interacting within the environment, different groups, different individuals, different cultures and speaking about the sustainability of the natural environment with humans as a part of it.*

Four issues were consistently identified as state wide issues in all focus group sessions: governmental regulation, the decision making apparatus or setting environmental policy, education, and general quality of life concerns.

a. regulation and control

The focus groups all engaged in a spontaneous discussion of local versus non-local control. They presented clear reasons why there was a need for some type of comprehensive regulation of the environment, and at the same time they clearly and emphatically stated that regulation needs to be responsive to local conditions and should not be blindly applied from a distance. Although some specific individuals in the focus groups did not agree with the existence of any federal regulations, the majority of the

participants in all of the groups expressed a need for some federal oversight. As one participant stated:

*Given the political climate in Arizona, I think we better be thankful that we have somebody trying to regulate from somewhere, as much as I am a small government person, when the environment is concerned you do need some regulation.*

A participant in another group stated the counter to this condition:

*We keep having these scares of the EPA the ADEQ keeps coming in here and, a few years ago, we had nitrate scare ... in this valley, big scare. Scared us enough that as landowners we went out and privately contracted and had all the water tested. We didn't have no problem.*

Additional comments on this issue are presented in later sections of the report.

b. quality of life concerns

The public's general quality of life concerns included specific issues of air, land, water, the social environment, housing, health care and the work environment. These formed an important theme in all of the focus groups. Each of these issues was discussed in terms of their effect on the quality of life of the focus group participants. Concerns about specific parts of the Arizona environment in each part of the state are represented in later sections of the report. However, more generic water, land, and air quality issues were also expressed that form part of a state wide concern.

Water issues that affect the whole state included availability, contamination and misuse.

*I think the biggest threat out here is probably to the water table. Because we're in an arid environment and if people pollute their water then that's pretty much about it.*

Land issues that were of state wide concern included mining, grazing, urban development, landfill issues, soil erosion, soil contamination.

*there was a lot of concern towards cancer clusters that erupted and nobody's really, you know, 100% sure what's going on there. Although, all the things they're blaming it on, you know, nobody's blaming it on rattlesnakes or tarantulas or a natural threat, they're all man made threats.*

Air issues included general contamination and visual beauty. The air concerns also were focused on indoor air quality, concerns with factory emissions, and automobile emissions.

An urban resident stated:

*I drive to Phoenix everyday and there's this black cloud right above and, what are they doing?*

Another stated,

*And when I saw that big brown thing there, in fact I was with my sister and I said well that, that can't be pollution because people come here, it's gotta be my eyes were burning and everything was, and I kept saying can't be, but it is.*

Water availability was also addressed in the realm of urban development. There was a perceived misuse of water and land by developers, such as golf courses in the Phoenix area.

*I guess one of my big concerns is just that there's gonna be enough. There's lots of development in the Valley and lots of people watering their golf courses and, I just wonder about how much water's gonna be around for the future*

Land issues also concentrated on the effects of urban sprawl and pollution.

c. environmental education as a state wide need

The belief that public education is a remedy for environmental problems was common to all of the focus group participants. The need for educational programs was seen as necessary to serve a wide range of specific groups. These included educating children in the schools, educating the public, educating ADEQ personnel about local conditions, educating the federal government and regulators, educating industry, and educating specific occupational groups about specific hazards and environmental needs (migrant workers, pesticide handlers, ranchers, chemical industries, home owners, etc.).

One participant stated:

*You have got to start educating people. That's how I see it ... I don't wanna spend the rest of my life attacking the symptoms.*

Another described the issues in this way:

*We all have our individual opinions, but I don't think we have enough scientific information and facts to really say, well, we really shouldn't worry so much about this, and maybe we should worry a whole bunch more about this other.*

A participant noted the need to educate in other arenas:

*The federal government in my opinion has a pretty poor history of being very successful in the area of education. I think local communities have really got to take a strong role in responsibility in making sure that people are educated in the issues and the ways that they want.*

The responses obtained from the focus groups also varied according to the community in which the research was conducted, since Arizona has a wide variety of environments and environmental concerns tied to the different regions and activities available in the state. The following sections summarize the specific issues that were discussed which have an important impact on specific types of communities, and the issues that are more localized, rather than of concern across the state.

### III. URBAN Issues

There were two focus groups conducted in urban areas of Arizona. The issues primary addressed in the urban focus groups were air, land and water quality. Air quality was almost exclusively discussed in terms of pollution from car emissions, and to a smaller degree from industrial pollutants. Land issues focused most frequently on the problem of chemical contamination of living areas and ground water, from industrial pollution. And water issues were divided between the availability of water and the contamination of drinking water from human wastes and from industrial pollution.

#### a. water

Water availability in relation to overpopulation and development is an important issue. The misuse of water by "snowbirds" and other non-native Arizonians was identified by both groups as a serious problem.

*these people bring their habits from the northern parts down to the southern parts, and mind they are older folks in their 60's and 70's. They are set in their ways and they don't realize that they can't just transplant their culture.*

Another participant stated:

*Like people from the Midwest, hosing down their carports or watering their cacti, it's funny but it's not funny.*

Golf courses were identified as enormous water wasters, as was the placement of non-native "water hungry" plants in new developments.

*They have almost one golf course for each person, at the rate they're going.*

The urban water concerns also involved industry, contamination, pesticides, issues of septic tanks and raw sewage appearing in water ways.

*Under certain weather conditions, that raw sewage comes to the surface. And that's not just true of [here],*

but true of a good many places in Arizona.

The issue of water contamination and health hazards were also addressed.

b. land

The land issues included overpopulation, overgrazing which may lead to the extinction of animals, urban development and land preservation, golf courses, soil erosion and chemical dumping. Development was viewed as destructive to the natural environment, in both general development and "snowbird" retirement communities. Landfill problems were also addressed. The more people move to Arizona, the more development, more pollution, increased water use and destruction of preserved areas.

c. air

The most important air issue was that of pollution and auto emissions. And that people are not willing to give up the luxury of their own autos.

*I think people said we value freedom, we value government not telling us what to do, so by God we're gonna drive our cars if it kills us, and it probably will.*

The potential solutions to car pollution that were expressed involve modeling effective transportation use in other countries, ie. subway systems, Eurorail. It also included the use of alternative, less polluting sources of fuel. The structure and lack of mass transit does not enable one to use alternative ways of moving around the city. Air pollution also is noted for contributing to health problems such as asthma and destroying the beauty of the surroundings.

*Our air pollution here, I think is the....well it's such a detriment and like you mentioned so many people have to leave the valley and I'm gonna have to go, and I don't want to*

Indoor air quality and asbestos contamination were brought out as issues that need to be addressed. The health risks associated

with air, land and water pollution were expressed. There is concern being expressed over the immediate visible harm as well as the harm that will accumulate over time.

d. education

The remedies that were suggested to deal with the urban environmental problems included the development of educational programs, social marketing techniques, and political action.

*I probably may be the only Democrat on earth that thinks government should be small. But where it should be is an a very important issue, like saving the planet, and I think that is ya know, the national government were to begin to have some sort of social marketing, some sort of an education program around it, that's the only way it's gonna happen.*

In recent years there has been more publicity about environmental concerns which in turn has changed the behavior of some individuals. But at the same time, the urban groups expressed fear of industry trying to roll back environmental regulations, and they expressed concern for the willingness of politicians to allow companies to engage in unlimited development of land. One participant commented on elected officials:

*We try to elect people that will do these things that we want done, but then we find out that lobbyists who are commercial and/or, are the ones that really get their way, we don't get our way anymore with politicians and our elected officials, and that's sad.*

e. the responsibility for change

The responsibility for changing the current conditions, in favor of local concerns, is seen as being both the responsibility of individual and the various levels of government. ADEQ and other organizations should be able to make a broad impact by regulations, enforcement and education to ensure a sustainable environment. At the local and individual level, individuals need to get involved, raise money for environmental concerns and have the responsibility to educate themselves on environmental issues.

#### IV. MID-SIZE COMMUNITIES

In mid-size communities the important areas of the environment were water, air and land issues. However, the specific nature of these issues differ from urban areas, to some extent. The mid-sized towns place less emphasis on automotive air pollution (although it is present), and have greater concern for the long term availability of water and access to public lands for ranching and recreation. A participant stated,

*I deal with health issues on a daily basis and incidents of cancer is increasing quite a bit. Incidents of diseases that were never here or ever even heard of five to ten years ago. Ya know, HIV and the different viruses and flues. There appearing because of how we have mismanaged the environment.*

Water and air were areas of the environment which were most thoroughly discussed. Risks to these areas discussed by mid-size communities ranged from landfills to the lack of enforcement of regulations.

##### a. Risks

The most commonly mentioned risks to the quality of water were landfills, sewage and contaminants from businesses and industry. One of the most commonly mentioned risks to land was the overuse of public lands from increased tourism. One person stated,

*gettin back to the Grand Canyon, you're talkin about people shouldn't go to the Grand Canyon. It's gotten to the point where is if you go to the Grand Canyon you fight traffic trying to find a place to park, go on a hike and there's a hundred people ahead of you and behind you down the trail and airplanes flyin over.*

Alternatively, public lands were also seen as being at risk due to overregulation by the federal government which kept the public from using the land for ranching or recreation. A participant stated,

*If the grazing fee goes from \$1.97 to \$9.00, if our concession fee at the Grand Canyon goes from two and one-half percent to 22% we're talking about, there's no more [local] Company. How many people will be put out of jobs.*

The most commonly mentioned quality of life risks centered on air pollution. One Native American participant stated,

*the San Francisco Peaks are very sacred to us and one of the things I do each morning as part of my ritual or as part of my daily process is that I should be able to look from Second Mesa and look at the San Francisco Peaks because I pray to those mountains, within the last five years on some days you can't even see the peaks.*

b. issues of responsibility

Those who were seen as being responsible for correcting or addressing the problems included the federal government, state government, local government and citizens. It was felt that the federal government should enforce regulations which were already in place but that they should also allow the interpretation or determination specific policy by the community and not as a general cure all applying to all communities. One participant stated,

*The laws are rolling out left and right, how they're to be implemented, how they can be controlled, how they can be enforced, no one knows. And what impact they're going to have, no one knows.*

The communities felt that there should be a balanced response to the environment from all constituents involved. A participant stated,

*The state of Arizona needs to find a balance between them, a balance between civilization and the natural environment.*

The participants stated that local and state governments should put more effort into solving existing problems. Another

participant stated,

*And what we're looking for is a balance because I think there's a critical mass of people in the United States now who demand a certain amount of pristine wilderness by their own system of values. The problem is realizing that we need little bits of all kinds of access to public land.*

Another person stated,

*I think the most natural environment is one that includes humans and one that is sustainable*

c. education

Most of the mid-sized community participants saw education as being a useful tool in confronting problems found in the environment. One person stated,

*I think education is the more important than any other part of the environmental problems and we need to educate people more on it.*

Another person stated,

*I look at children today, I think they're even much more conscious of the environment and that's because of education. I think they are much more aware of that than probably my generation or generations older than I am.*

Other issues which were discussed by the communities included the use of alternative materials that did not harm the environment and recycling of garbage. One participant stated,

*I guess in an ideal world what I'd like to see is the technology that we have right now being used to protect the environment. Not use the technology for destructive purposes."*

Another participant stated,

*Why don't we make houses out of material that's goin to last for hundreds of years instead of wood that's goin to rot.*

#### V. FARMING AND RANCHING COMMUNITIES

In farming and ranching communities water, land, use of land and air issues were discussed in relation to two sometimes competing, but often complimentary conditions. The first was the preservation of the commercial use of the land for food production, not only for this generation, but for the future. The second was the appropriate balance between the use of modern technology to improve production, and the threat that some of that technology poses to air, land, and water quality.

##### a. water

The issues expressed concerning water ranged from availability of water for food production, to the quality of drinking water. One participant stated,

One person placed the priorities as follows,

*I'd say water, then use of the land, and then air for our area. Because agricultural industry is more directly, y'know. So, I go, water, land, use of land and then air.*

Another stated,

*I think about the quality of water. I know that here in the valley, statistically, health problems and so forth are very high, like birth defects, but in this area I think that's something serious.*

##### b. land

Land conditions were nearly always discussed in relation to the soil, focused primarily on the use of land for farming and ranching. Farming and ranching communities agreed that water availability and usable land were the most important areas of the environment in their communities. The human element of the environment was also felt to be an important issue. One participant stated,

*You asked what parts of the environment's important... and I think that humans are. In fact, I'd say they're the most important part.*

Other environmental issues of importance which these communities mentioned included air quality and cultural resources. Issues with air quality centered on air pollution and contaminants while cultural resources were discussed with respect to Native Americans and the loss or vandalism of cultural resources.

c. risks

Risks to environmental areas discussed in different farming and ranching communities were similar. Risks to water quality in these communities was described as being caused by sewage from homeowner's septic tanks. One participant stated,

*All of those homes strung across the country there, they have no sewer systems, they have to have septic tanks and leach lines which gets in the water.*

Overpopulation and big industry were also seen as a risk to farmland, ranching, water, air and soil. One person stated,

*I think that there are some things that man is doing in our own backyard, the Palo Verde Power Plant, one of the nuclear power plants in our environment, when it comes to the bottom line, I'm just appalled that electric companies are utilizing nuclear energy and yet there is no safe means to dispose of whatever the waste is.*

d. government regulations

These communities felt that there has been an overemphasis placed on the farmer or rancher by government and the public, as having created a great risk to water quality. One person stated,

*I've had people honestly come up and tell me "well, what do you do?" "I'm a rancher." "Well we need to get rid of you people." "Now wait just a second, why do you need to get rid of us?" "Well, you guys are polluting the*

ground, you overgraze, your affecting the environment." Well ya know we don't really do all that stuff, there are some bad ranchers but there's bad hunters, there's bad cops and there's bad doctor's.

The primary risk to land use and availability was identified by participants as the regulations which were placed on public and private land by nonlocal governments including state and federal agencies and lawmakers. One person stated,

*In farming, with any kind of pesticide, I have restrictions on what I use and how I use it, and how much I use. And, my wife can go to Safeway and buy something off of the shelf that is potentially far more toxic and dangerous and harmful to the environment to my family than anything I can go and buy at a chemical store to use on the fields.*

Also, the lack of knowledge by government (about local conditions) when forming policy or sampling the environment in their community was seen as a risk not only to water, air and soil but, also, to the humans living in those communities since they had to work and abide by the government regulations and agency policies. These communities felt that human productivity was seriously hampered by overregulation or regulations which were general and did not provide adequate solutions to risks. One person stated,

*Some of the environmentalists guidelines they're puttin on ranchers, and they're on BLM government owned ranches predominantly, and they're guidelines and mandates are gonna put these ranchers out of business.*

The responsibility for addressing or correcting the problems found in the environmental areas differed according to the level of government involved. The farming and ranching communities felt that the federal government was responsible in providing funds for solutions to problem areas in the environment while local government should determine policy for the solution. One person stated,

*It becomes the role of government in the end. Government is supposed to fund things that people cannot individually*

accommodate.

While another participant stated,

*What we can do is to take control away from the federal government and put it in state and local governments and us. We don't need big brother in Washington telling us what our problems are and what we need to do to solve them. If we had more local control and input and say in regulations and governments and to deal with ourselves rather than having someone else deal for us, is a good point.*

The communities did not feel that the federal government was familiar with their needs or resources well enough to make policy on farming and ranching methods or their use of the environment.

However, the participants from these communities also strongly felt that the individual farmer, rancher or resident of a community should be responsible for protecting and preserving their environment and should not use governmental rules as an excuse to harm the environment through ignorance, neglect, or greed. One person stated,

*I think anyone that is involved in agriculture, ranching and farming dealing with the soil or with earth, is concerned and rightfully should be concerned with the environment and should be stewards of that environment and take that occupation seriously and take that responsibility seriously.*

A sustainable environment where government and citizens agreed upon regulations to govern the use of the environment was discussed as being a viable alternative to environmental problems. This can be summed up by one participant's statement,

*"they both have to be understanding of the other's position and ...learn to work together as a team. They should be a partner, not a dictator."*

e. alternative materials use

Other issues that were discussed by these communities during

the focus groups pertained to alternative material use and environmental education. One person stated,

*I guess I wish that instead of screamin' at the farmers about the pollution that they're doing to the air, well then why don't they find an alternative to the air conditioner that I have in my house that uses ammonia and stuff. It seems to me as smart as we are that we ought to be concentrating on those areas.*

The farming and ranching communities felt that alternative materials could be used or developed to replace materials that were harmful to the environment. They also discussed the importance of education in environmental issues. One person stated,

*Education is going to play a big part in educating the people of what their involved with and what needs to happen to maintain our environment in a proper perspective.*

## VI. BORDER TOWNS

In border town communities the water, soil, air and quality of life issues often revolved around the relationship between the U.S. and Mexico. Each environmental issue in these areas is more complex than in most other locations, due to the impact from local contaminants or pollution that is compounded or even overwhelmed by simultaneous pollution from Mexico. Local risks to the environment included underground storage tanks, chemicals from dry cleaners and other businesses which leach into the groundwater, and waste from industry. However, international risks were seen as being the most serious of many of the problems confronted locally, because the solution to the international problems was often out of the control of the local group.

### a. the border

The most common risk discussed by border town participants was the lack of international regulation of contaminants which cross the border from each country. Chemical dumping was feared, especially since it could not be controlled through the artificial borders between the state and Mexico.

Here, we have artificial borders between the United States and Mexico, but really they're our neighbor, they're very close and their behavior will effect us dearly.

One participant stated,

...there's a certain inability of the federal government, certainly the state government or the local government to deal with Mexico..

Another person stated,

And so what happens is like with the air quality thing and trying to get them to test the air quality. You could see the dump burning. I mean it was a heavy fog. It's like London. It was all toxic smoke from across the border, and yet EPA was draggin' their feet and draggin' their feet, according to some it's because they don't wanna know the problems, they don't want it down in numbers because then what will they do about it. And, I think that there are things that can be done. The EPA has powers that they aren't using.

International risks from neighboring Mexico included raw sewage and chemicals being dumped into the rivers, burning landfills, and foreign industry from the United States and Japan not being regulated. One participant stated,

Basically, all of us here are stakeholder's and our health has been imperiled greatly. Our situation is no less serious than Love Canal, Woberry, Massachusetts or any other of those places. Here we are dealing in an international border.... the American companies and a few Mexican and Japanese companies manufacturing in Mexico are unregulated or under-regulated.

Another individual discussed the problem of a burning waste dump in Mexico,

So, the burning is a very very big issue here. We all smell it. We all breathe it and we all taste it. And this is all over.

Another problem is chemicals that are illegal in the United States are being sold to Mexico and used there on food resources. One participant stated,

*Y'know when you said that about the cattle being dipped and transported , that've been dipped through chemicals that are illegal in the United States and shipped into Mexico, and the cattle are brought back.*

Another person stated,

*There are chemicals that the FDA had deemed that are illegal here in the United States, they can't use'em. But they can manufacture them here and ship them off to Mexico.*

In general, all of these risks were seen as being the cause for a poor quality of life for those living in border town communities.

b. responsibilities

The people and institutions who were seen as responsible for the environmental issues found in border town communities included all levels of government, Mexico, and the residents of the community. It was felt that the federal government should enforce regulations established by NAFTA (North American Free-Trade Agreement) and IBWC (International Boundary and Water Commission). One participant stated,

*It's the federal government's responsibility to step in and cure these problems. They're in charge of the frontier or the border, whatever you wanna refer to it. If Mexico started having their army shoot bullets over here I think the federal government might get off of its butt.*

Also, ADEQ was seen as needing to provide money and effort in correcting problems which are already known to exist in the community. One participant stated,

*I know some people who feel that there's this monster in Phoenix, just kinda sucks things in and nothing much comes out except maybe more regulations that ball people*

*up in minor ways and here's these glaring problems and they kinda twiddle around it. They ought to be servants of the state and we're part of the state and we got big problems. For a little community they're are monstrous problems. I mean for any community. We're too far away from the State of Phoenix.*

Local government should enforce and regulate problems such as illegal burning of trash and dumping of chemicals which occur in the local community. One person stated,

*I feel abandoned; not only by the state government but by the federal government. Problem solving starts with the local government.*

There was also a feeling by many community participants that they were now being studied to death. They have studies going on from ADEQ, from the state universities, from the EPA, and from the state health department. On the one hand, the stakeholders know that there needs to be a documentation of their problems. On the other hand, they eloquently point out that the only thing that these studies often result in is a call for more studies. They need action, not just studies, and they feel they need it now. So many of the problems are so obvious, that knowing the extent of the problem is not nearly as important as starting to get it solved.

The border town communities stated that the highest incidents of cancer and Lupus could be found in their communities and were caused by local and foreign contaminants found in the air, water and soil. One participant stated,

*If you're drinking water from here, if you're breathing air you're still gonna get sick. We have one of the highest ever documented rates of Lupus. Ever!*

One community identified one local street as "Cancer Alley" due to the high rate of cancer found in residents living along that street. These communities also felt that it was important to continue educating everyone from politicians to children about the environment. One participant stated,

*Without educating our children, we will get nowhere.*

*Because this is the world we're leaving them. If we don't start opening their little eyes now, we'll have betrayed ourselves, we'll have betrayed them.*

The final issue addressed by border town communities was the presence of environmental racism in the state. Many of the participants felt that other communities in the state were receiving more attention or effort on the part of ADEQ and the federal government, and that Hispanics in particular were being ignored in the process. A participant stated,

*[Border town] is mostly Hispanic and poor working class area, it's not Sedona, so there's not a lot of lobbying power here to fix the problem.*

Of all of the focus groups, the border town stakeholders expressed the greatest immediate concern about the environment. And they expressed the greatest anger at the inept handling of their problems (health, water, land and air) by the federal government, the state government, their neighbors in Mexico, and by parts of the local government. The frustration level is high. On the positive side, major portions of the community are organizing around environmental issues, including coalitions of the public, government, and organizations. They realize that they will probably have to create a confrontation on many different levels to get their voices heard. At the same time, even if the politicians and agency leaders listen to them, there is a need for immediate action, since the problems grows are an increasing pace with NAFTA and the continuing industrialization of the border

## VI. NATIVE LANDS

The issues addressed in the Native American focus group included concerns about air, water quality, land, birthrate, mining and uranium contamination.

### a. risks

There was a strong concern expressed by the group that mining processes, necessary for economic development on the reservations, were leading to water contamination and that the problem was being overlooked due to lack of proper monitoring

devices. These concerns were expressed primarily in relation to uranium contamination and underground storage tanks. One participant stated,

*I think the biggest threat out here is probably to the water table because we're in an arid environment and if people pollute their water then that's pretty much it.*

Another stated,

*There is not a ground water monitoring system in place, and that's one thing that the Department of Energy needs to get in place immediately. We really don't know which way the plume is going, but we suspect that it is coming down towards this area here.*

There also was concern over long term water availability; the issue of continually "mining the aquifer" for industrial purposes.

*The ground water systems, to us is a big environmental problem. And when you use that kinda water for industrial purposes, in that case slurring and pulverizing coal, to Bullhead City, your depleting the thin aquifer and something has to happen, when you've been mining water for 20 years. And when you're in an area it's too to make sense, although the government will tell you otherwise, but, I think common sense tells you that's something's terribly wrong here.*

Several issues were discussed which related to land use and contamination. The first concern was abandoned uranium mines and the risks associated with contamination.

*There are old uranium mines all over this area, there are people out here in District three who's domestic water supplies are contaminated by radioactive materials and so on. There is a great deal of this potential within the region of the western Navajo agency in the Moencoppe Village and so on.*

Another concern addressed was the land fill closure and illegal dumping of waste. This issue was also tied into the issue of the reservations disposing of their own waste, rather than paying

outsiders to ship and dispose of their waste. It was noted that this solution would have the added benefit of putting Native American money back into the reservation economy.

*I want to go back and address just briefly the issue of hauling trash off the reservations. This position's always kinda puzzled me a bit because on one hand we talk about paying someone else to take care of Navajo nation trash. It seems like you could connect the two together and put in some sanitary landfills on Navajo nations.*

Other issues addressed were soil erosion and land deterioration as a result of overstocked land, overgrazing and land use. In addition the participants raised the issues of beauty and the environment. In regards to the beauty of the land, vendors, billboards and litter were addressed.

*I'm sensitive to that because I appreciate the scenic beauty of the reservation, and when I see the proliferation of unsightly signs in the wrong places, and they're not taken care of and managed -- I think it needs to be addressed.*

Air quality was of concern. Both indoor and outdoor air quality were addressed in respect to wood burning stoves. The concerns are rooted in the potential health hazards of use.

*When you burn wood or coal -- that's the release of sulfur gas and oxide to your house -- it's more concentrated -- the ambient air doesn't carry it out, see the wind doesn't carry it out. It's more concentrated in their house.*

Auto emissions were also addressed in regards the growth of the area. The last issue was traveling pollution from other states and the impact on the environment. Pollution of the Grand Canyon from industrial sites in California in particular was mentioned as a problem of this type.

The health hazards on Native lands included concern for both livestock and the people of the community. There was a significant fear expressed of not knowing the health hazards that might be caused by uranium contamination and other pollutants.

No one really knows for sure the extent of these threats are because, we don't have baseline scientific information. We know where the obvious problems are but not to what extent these are threats to either the environment or to people's health

Another issue that received much attention was the balance between the environment and economic development. Some focus group members expressed the desire to have stricter environmental regulations but at the same time, felt that more regulation would retard economic growth for Native American people.

*It's more a political issue. The politicians want economic development, everybody wants economic development, the local ordinance want economic development but they have to do a balancing act, they have to weigh the kind pollution that they are going to be generating, stuff like that. ... Is economic development worth destroying your environment, see? I guess the bottom thing is that this land or reservation land is all we have left.*

The solutions to expressed problems involved education and community solidarity. They felt that the tribal governments need to be educated on environmental concerns and the tribal government needs to educate the general population. This educational process would involve the allocation of monies to fund educational programs that can be administered at the local level.

The focus group expressed a number of criticisms of both the state and federal government. It was stated that the ADEQ and the EPA have been untimely in their response to environmental problems. And when the EPA, DOE or ADEQ does respond, they do not respond satisfactorily.

*You assume that there are specialists who are actually working on that. I don't know, this may be one of the most dangerous assumptions that we can make is that people are really dealing with those issues.*

One respondent gave an example of inaction,

*They went to Washington to the EPA quarters and things rolled downhill. We went out there to do a compliance inspection stuff like that. The federal government, EPA just said yeah, they're generally in compliance. But from our end, at the local government, we didn't think so.*

One issue was raised about the state of Arizona; that the state takes money away from the tribes in taxes but does not put any money back into programs. It is a belief that because contamination is occurring on the reservation, that is why nothing is done.

*If this was anywhere else, if this was Flagstaff, whether or not DOE would be more responsive. The fact that this is the reservation, nobody wants to do anything about it.*

#### VIII. MIGRANT COMMUNITIES

Migrant farmworkers play an important part in the economic well being of Arizona agriculture. The environmental issues in the migrant communities varied. but primarily focused on sanitation, health, and working conditions such as exposure to pesticides. The concerns included housing, pesticides, health hazards and health care availability.

##### a. health concerns and the environment

The water concerns expressed in the focus group included both water contamination and the availability (or lack of) potable drinking water while people were working in the fields, or living near them. Many felt that migrant and seasonal workers are not provided with safe drinking water while working in the fields or where they reside.

*Seasonal farm workers need, just like say the rest of the population, drinking water that is safe. That is not polluted with chemicals and or, biological entities that cause harm, including pesticides*

Health care availability and housing were also discussed as environmental issues that have an impact on migrant health. The concerns of migrant health included the availability of services, depression, family violence and pesticide poisoning.

Looking at some of the environmental issues like, alcoholism and poverty and living conditions, when we go out and try to do health education we can't really expect these people to be that interested in their environment. Taking care of it. Trying to protect it.

The concern with pesticide poisoning was that the symptoms do not occur over night. Some of the participants felt that migrant lives are shortened through exposure to chemicals and the elements.

People recognize acute poisonings a lot more than they recognize chronic effects and I don't think there's a lot out there to help people recognize those vague clumps of symptoms that's chronic pesticide poisonings

The issues addressed with housing included, affordability, overcrowding, lack of facilities and lead contamination. One participant stated, "We have a third world situation out there".

The housing is in such bad shape that if you complain enough, they'll just raze it and not build again and those same people will be back next year to harvest and they won't have anywhere to live so they'll be in their cars or you find them out there.

Labor issues included the lack of sanitary conditions, including "John J's", lack of rest areas, and lack of water in the fields.

Well people's lives have been lost this last year because of working out in the environment. Because of the heat because of the pesticides, when you talk about quality of life, that's the end of a life and how many of these lives have been lost because they have been working out in the heat.

#### b. responsibility

The issue of "who is responsible" for dealing with the conditions that affect migrants, included a lengthy discussion of regulatory and political issues in Arizona. There was a general feeling that the federal government ignores migrants, and that the state government does not act in the best interest of it's

migrant constituents.

*Given the political climate in Arizona, I think we better be thankful that we have somebody trying to regulate anything, because it's not gonna happen here. If we are not regulated from somewhere, as much as I am a small government person, when the environment is concerned you need some regulation.*

The other environmental concerns include, Arizona giving large tax breaks to corporations while not taking care of it's people; politicians not being educated on environmental conditions; and generally being unsupportive financially of environmental problems. Part of the problem was seen as the way the current governor and legislature keep asking for more work and more impact from fewer dollars being allocated.

*we can only do so much. Kinda reminds me of when you're a boss, you gotta budget and you try to do upteen thousand thing and they keep telling you well just stretch this a little bit more. Go head and do that. How long can you stretch that rubber band?*

The participants also identified concerns out in the field from not having a water monitoring system to test contaminants, and a general lack of enforcement of environmental regulations.

c. resources and education

The solutions discussed for dealing with environmental hazards were money and education, to try to curb pollution and remedy existing problems. The call for education included the need for educating politicians on the problems that exist, educating migrants (bilingual), educating children and the general population.

*You need to give people specific examples of how when certain parts of your community is missing something, it does impact everybody. Because a lot of people don't understand anything else. They really don't understand , it can be off over there and be a problem that doesn't effect them, but there are lots of farm worker health issues that impact everybody in very*

*definite ways and we have to let people know what those are.*

There was also a level of pessimism regarding educating the migrant workers. It was stated that the migrants basic needs are not being met, therefore, how could one expect them not to litter or defecate in the fields, while they are fighting for everyday survival.

How could you ask them to take care of the environment? I they are fighting for that one day. You gonna ask me to take care of the environment when I'm trying to survive 8 hours work?

Other solutions to environmental ills included recycling and use of alternative energy sources, conserving rather than consuming. The problem of over population was addressed as contributing to resource problems in Arizona.

#### **IX. SUMMARY**

The ACERP qualitative research summarized above provides a view of the primary environmental issues in Arizona, in the words of representative shareholders in the state. We have included people's own explanations of what these issues mean to them and how they are attempting to deal with them (through education and political actions).

This information is useful, by itself, for comparison with the views expressed by environmental experts, by politicians, and by other citizens around the state. The results of the research indicate the complexity of the environment (air, land, water, health, population, and esthetics), and the differences in opinion and recommendations for action that come from a variety of sectors of the population who are concerned about both the environment and human impacts on it.

This information was also used to help create the state wide statistical survey of environmental concerns that form a companion report to the qualitative effort. The qualitative survey assured that we were not ignoring important public concerns about the environment, and the quantitative survey allows us to determine in considerable detail how the issues and

concerns we identified are distributed through the state, and within specific segments of the population.

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**ACERP PUBLIC VALUES ASSESSMENT**

**Results from a Survey of Arizonans**

**Frederic I. Solop, Associate Director  
Social Research Laboratory**

**Raymond Michalowski, Chair  
Department of Criminal Justice**

**Northern Arizona University  
May 30, 1995**

## METHODOLOGY

The Social Research Laboratory (SRL), College of Social Behavioral Sciences, Northern Arizona University was contracted by the Arizona Comparative Environmental Risk Project (ACERP) to conduct a survey on public perceptions of environmental risks among Arizona residents. Drs. Raymond Michalowski, Chair of the Criminal Justice Department, and Frederic I. Solop, Associate Director of the SRL and Assistant Professor of Political Science, served as co-principal investigators for this project. The research team included Kevin Meek as Assistant Research Coordinator, and Stacey Acton, Terilynn Bray, and Elaine Rodriguez, SRL graduate assistants.

The main component of the research design included a telephone survey of Arizona residents. An 800 person probability sample reflecting the geographical distribution of adult residents of Arizona was constructed using a randomly generated phone sample provided to us by Survey Sampling, Inc.. The Perceptions of Environmental Risks survey was conducted between April 5 and April 14, 1995. The data has been weighted using standard scientific procedures to accurately reflect the demographic characteristics of the adult population of Arizona. After weighting, the total number of respondents is 799.

The percentages obtained in a sample survey are estimates of what the percentage would be if the entire population had been surveyed. "Sampling error" is a social science term which describes the probable difference between interviewing everyone in a given population and interviewing a sample drawn from that population. The sampling error associated with a sample of 800 persons is +/- 3.5% at a 95 percent confidence interval. Thus, if 50 percent of those in a sample are found to agree with a particular statement, the actual percentage of agreement in the population from which the sample is drawn would be between 46.5% and 53.5% (50% +/- 3.5%), 95 out of every 100 times that population was sampled.

Sampling error increases as the sample size is reduced. For example, if statements are made based on a sample size of 300 persons, the sampling error is +/- 5.8 percent. This fact must be kept in mind when comparing the responses of different groups within the sample (e.g. men versus women). Thus, smaller numbers of respondents on any particular question translate into higher sampling errors. Sampling error does not take into account additional sources of error inherent in any study of public opinion

The following three sections of the report include a narrative analysis of the values, concerns, and perceptions of responsibility held by the Arizona public. In addition to a narrative analysis, each section includes graphical and tabular representations of the data. The annotated ACERP survey can be found at the end of this report.

**VALUES**

## A. Baseline Assessment

The Public Values Survey of the Arizona Comparative Environmental Risk Project asked a cross-section of adult, Arizona residents about their values and concerns regarding environmental issues. The demographic breakdown of the respondent group reflect the demographic composition of the adult, Arizona population: half of respondents were men and half were women; two-thirds of respondents have children; one quarter are single, just over one half are married, 12 percent are divorced and 7 percent are widowed. The complete demographic breakdown of the respondent population is found in the Annotated Survey (Questions D3 - D23).

To gather a baseline assessment of the level of value Arizonans attribute to the environment, respondents were first asked to identify what they like most about living in Arizona (See Table 1). More than two-thirds of respondents (68%) identified the climate as the factor they like most. The next most frequently cited factor was the desert, mountains, and/or other natural areas in Arizona. Eleven percent of respondents offered this answer. Other responses to this questions included clean air (3%), living close to relatives (2%), the open spaces and low population of the state (2%), the friendly, easy-going culture of the state (2%) and the low cost of living (2%). Other responses were identified by 1% of respondents or less.

Another step in developing a baseline assessment of the value Arizonans attach to the State's environment involved asking respondents to self-rate their level of concern for four different issues in Arizona: crime, education, the environment, and jobs/taxes. The mean response levels to these four questions indicate that crime is the issue of most concern to Arizonans. On a scale of 1 to 5 with 5 being the greatest level of concern, the mean rating of concern for crime was 4.45. Education came in with the second highest level of concern at a mean rating of 4.22. The environment was of third concern with a mean rating of 3.98 and jobs/taxes was fourth with a mean rating of 3.90 (See Figure 1). These relative levels of concern appear to be consistent across all demographic sub-groups.

In order to ascertain the specific levels of importance Arizonans attached to the environment, the survey asked respondents to self-rate their level of concern for the well-being of Arizona's environment. Respondents rated their concern on a scale from 1 to 10, with 1 meaning they had no concern whatsoever about the environment and 10 meaning they were very concerned about the environment. (See Figure 2 ) Nearly one-third (30%) of all respondents gave themselves a 10 on this scale while only 1 percent said they are a 1. When this data is recombined into three categories (Weak concern=1 to 3; Moderate concern=4 to 7; Great concern=8-10), two thirds of respondents (65 percent) fall into the great concern category. (See Figure 3)

This high level of concern for the environment is evident across all demographic sub-groups within the population. However, some interesting variations occur within demographic categories. Women expressed the greatest level of concern for the environment with 72 percent self-identifying as having great concern. By comparison, fifty-eight percent of men

self-identify as having great concern for the environment. This fourteen point difference is larger than differences seen within other demographic groups (See Figures 4a and 4b). It is important to note, however, that although more women express great concern for the environment than men, a clear majority of *both* men and women identified themselves as being greatly concerned about the well-being of Arizona's environment.

There is a thirteen point difference in great concern between the highest and lowest income categories. Fifty-nine percent of people making more than \$60,000 per year have great concern for the environment compared to 68% of people making less than \$30,000 per year. There is also a 10 point difference in proportion of people having great concern for the environment between older residents of the state (58%) and younger residents (68%). While there are differences in levels of great concern within other demographic groups, these differences are not as statistically significant as those just mentioned.

Additionally, as part of this baseline assessment, the survey asked respondents if they currently belong to or contribute money to any environmental organization. Twenty percent of respondents answered this question in the affirmative.

In conclusion, the Public Values Survey indicated that the environment is highly valued in Arizona, and that the vast majority of Arizonans are very concerned with preserving its quality. Many people are drawn to Arizona for the climate, natural areas, and other environmentally related reasons. While the environment rates third in level of concern within a list of four issues, many people self-identify as having great concern for the environment. This level of concern holds across all demographic groups with women, younger residents and residents with lower incomes having the greatest concern for the environment within the state. The high levels of concern for the environment among Arizonans is also evident with a significant number of respondent either belonging to or donating money to environmental organizations, which indicates substantial public willingness support environmental causes.

## B. Specific Assessment

The Public Values Survey of the Arizona Comparative Environmental Risk Project was specifically designed to probe environmental values beyond the surface level. In order to develop a "feel" for how Arizonans understand various environmental issues, prior to development of the survey itself, a series of focus groups was held in various locales. One of the major value differences emerging from these focus groups concerned the degree to which people gave priority to supporting or promoting environmental protection versus the degree to which they supported policies in pursuit of economic growth. To probe this apparent value conflict between Arizonans further, survey respondents were asked to identify their support for one of three statements: economic growth should be given priority, even if the environment suffers to some extent; protection of the environment should be given priority, even if economic growth suffers to some extent; or, we can have economic growth and environmental protection at the same time.

Study results indicate that almost three-quarters of respondents (73%) sought out the third statement that strikes a balance between economic growth and environmental protection. Twenty percent of respondents preferred environmental protection over economic growth and 6 percent prefer economic growth even if the environment suffers to some extent (See Figure 5 and Table 2). Responses predictably were skewed in favor of the compromise position which does not require respondents to make any hard choices. This favoring of compromise is characteristic of all demographic sub-groups in the survey. The groups most supportive of environmental protection is sales/ service/ operational workers (24%) and the groups most supportive of economic growth are self-employed-small business owners (11%) and sales/ service/ operational workers (11%). The compromise was least supported by the sales/service/operational workers (65%) and more supported by higher income earners and women.

To further explore public values concerning the environment in Arizona, respondents were asked to state their level of agreement with six statements. Levels of agreement were declared as either strongly agree, somewhat agree, somewhat disagree, or strongly disagree. The six statements alternated between statements that were clearly stated in pro-environment terms and pro economic growth terms. As the graphs charting this data display, there is a greater consensus supporting the pro-environment statements than supporting the pro-growth statements. Support for the pro-environment statements ranges from 69 percent to 89 percent (See Figures 6a, 6b, 6c). Support for the pro-growth statements range from 18 percent to 65 percent (See Figures 7a, 7b, 7c). In fact, two out of three pro-growth statements are supported by only one-quarter of respondents or less. The notable exception to this value declaration is the two-thirds support for the statement that taps into personal duty regarding one's family. These patterns emerge as patterns shared across all demographic sub-groups within the population

In an attempt to develop a better understanding of value dimensions, questions within this section of the survey were recombined in ways that conformed to directions emerging from the focus group research. The first dimension--an environmental dimension--was constructed from the two questions with the strongest environmental implications: 'We must protect the environment even if it means that some jobs in the local community are lost,' and 'We have to protect the environment for our children and our grandchildren even if it means reducing our standard of living today.' This environmental dimension reveals that 73 percent of respondents offered answers that consistently reflect a pro-environmental stance (See Table 9).

The second dimension--a utilitarian dimension--was built using the following statements: 'The purpose of plants and animals is to serve the needs of human beings. If something doesn't help human life, we don't need to protect it,' and 'My first duty is to provide for myself and my family. Protecting the environment has to come after that.' Fifteen percent of respondents to this survey consistently selected the utilitarian options reflected by this dimension (See Table 9). The third dimension--a pro-economic growth dimension--combines these questions: 'We must protect the environment even if it means that some jobs in the local community are lost' (negative responses) and 'We can have a thriving

economy even if we do not protect the environment.' This dimension places 12 percent of respondents in the pro-growth camp (See Table 9).

Overall, the values component of the Public Values Survey revealed that Arizonans overwhelmingly identify themselves as having a great deal of concern for the environment. Additionally, there appears to be strong support for policies that protect the environment as compared to policies promoting growth. This concern is manifest in the consistent support for statements that reflect a pro-environmental position and consistently weak support for policies favoring economic growth where they would reduce environmental quality. Two important exceptions, however, must be noted. First, when respondents are asked about their level of personal duty to their families, they indicate clearly that this is a priority over protecting the environment. Second, it is clear that Arizonans would prefer to not have to choose between a health environment and a strong economy.

Finally, when the environmental values survey were further triangulated by the development of three value dimensions, the environmental value dimension is supported by almost three-quarters of respondents. By comparison the utilitarian and pro-economic growth perspectives are supported by 12 to 15 percent of respondents.

Table 1.

**WHAT DO YOU LIKE MOST ABOUT LIVING IN ARIZONA?**

The Climate	68%
Desert/Mountains/Natural Areas	11%
Clean Air	3%
Close To Relatives	2%
Open Spaces/Low Population	2%
Friendly/Easy-Going	2%
Low Cost of Living	2%
Everything	1%
Low Crime	1%
Access to Tourist Sites	1%
Low Taxes	1%
It is Home	1%
Don't Know	1%
Nothing	1%
Other	5%
Total	102%

(N=799)

## LEVELS OF CONCERN FOR CURRENT ISSUES

Now I'm going to read you a short list of issues concerning Arizona. I would like you to tell me how much you are concerned about each one. Please rate your level of concern from 1 to 5, where '5' means this issue is of great concern to you, a '3' means you are moderately concerned with the issue, and a '1' means the issue is of no concern to you at all.

**Figure 1.**

- Crime in Arizona
- Education in the state
- The quality of Arizona's environment
- Jobs and taxes in Arizona

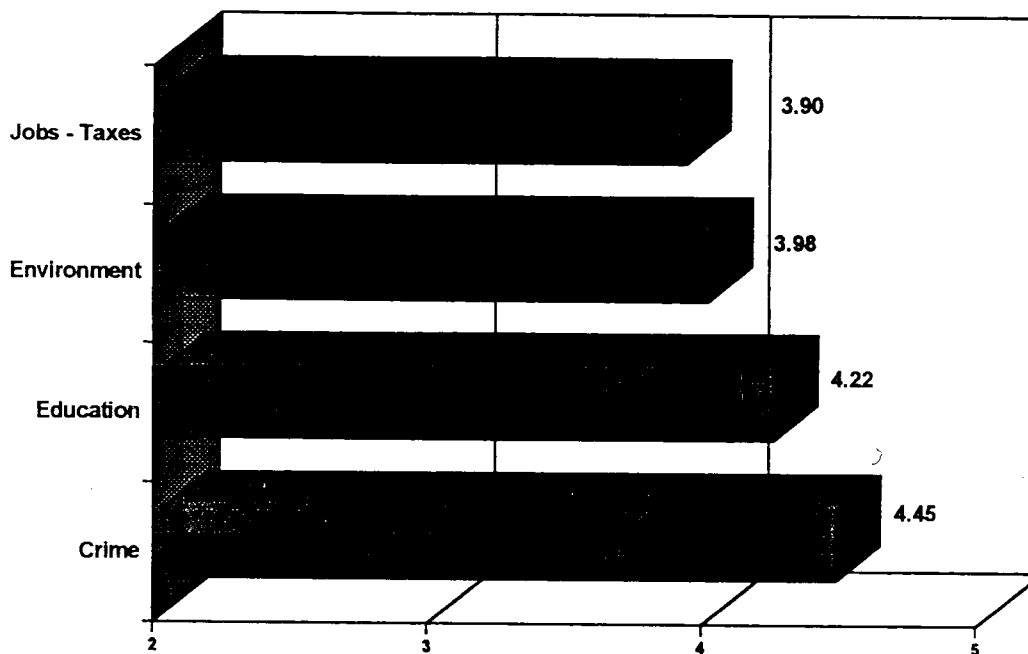
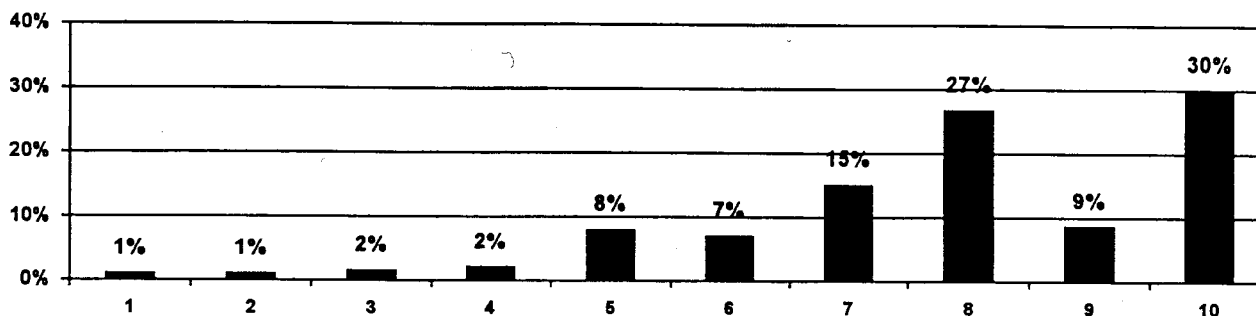


Figure 1. Shows that out of the four issues presented to respondents; Crime was reported as being of most concern to Arizona residents (Mean of 4.45). The second issue of most concern to Arizona residents is Education (Mean of 4.22). The last two issues of concern for residents is the Environment (Mean of 3.96) and Jobs/Taxes (Mean of 3.90). Note all of these issues are higher than the moderate concern level (3). This information is consistent with "Arizona Poll" data collected by the Social Research Laboratory over the past three years.

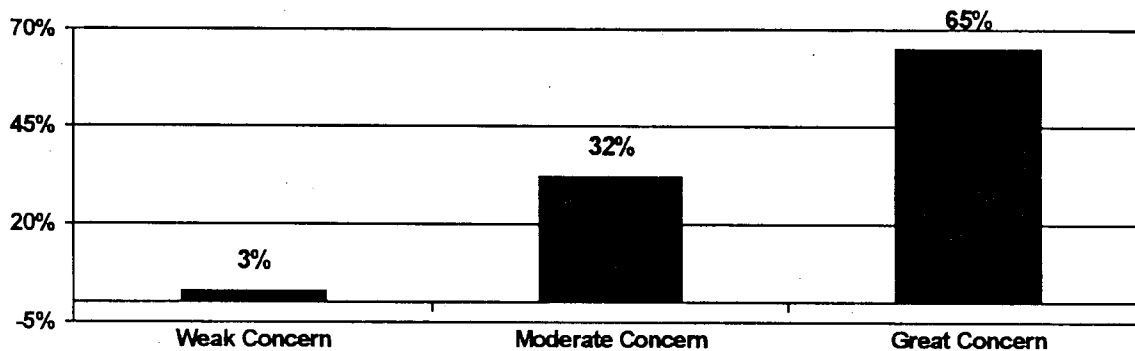
## LEVEL OF CONCERN FOR THE ENVIRONMENT

**Figure 2.** Please rate how strongly you feel about the environment on a scale from 1 to 10 where "1" means you have no concern about the environment whatsoever and "10" means you are very concerned about the environment.

Figure 2. Shows how respondents rank their concern about the environment from 1 to 10. One being "no concern" and 10 being "very concerned".



**Figure 3.**

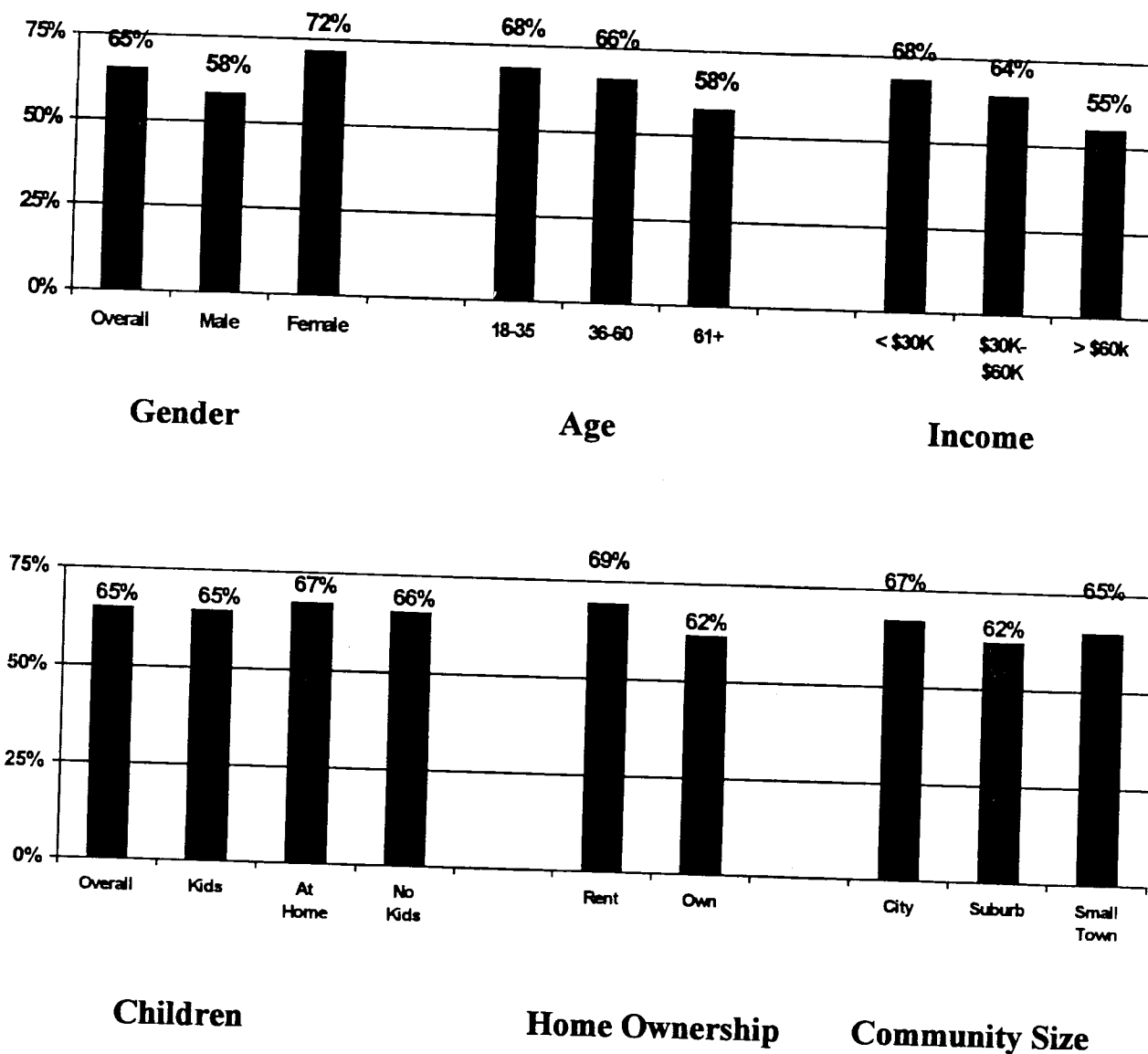


The above scale is combined into general categories. Below Weak Concern (rank 1,2,3), Moderate Concern (rank 4,5,6,7), and Great Concern (rank 8,9,10). Three percent of the respondents have Weak Concern for the Environment. Almost one third (32%) of the respondents show moderate concern for the Environment, and finally 65% of the respondents express Great Concern for the Environment. Note: Percentages between figures 18 and 19 are slightly different due to rounding difference.

## GREAT CONCERN FOR ENVIRONMENT BY SUB-GROUP

Figure 4a. (n=520)

Percentages represent respondents reporting great concern for the environment broken down by demographic categories: Gender, Age, Income, Respondents with Children, Children in Home, or No Children, House Ownership, and Size of Community respondent lives. It is interesting to note that environmental concern cuts across most demographic sub-groups. The greatest difference in environmental concern are noted for men versus women, older versus younger respondents, and lower versus higher income respondents.



## GREAT CONCERN FOR ENVIRONMENT BY SUB-GROUP

Figure 4b. (n=520)

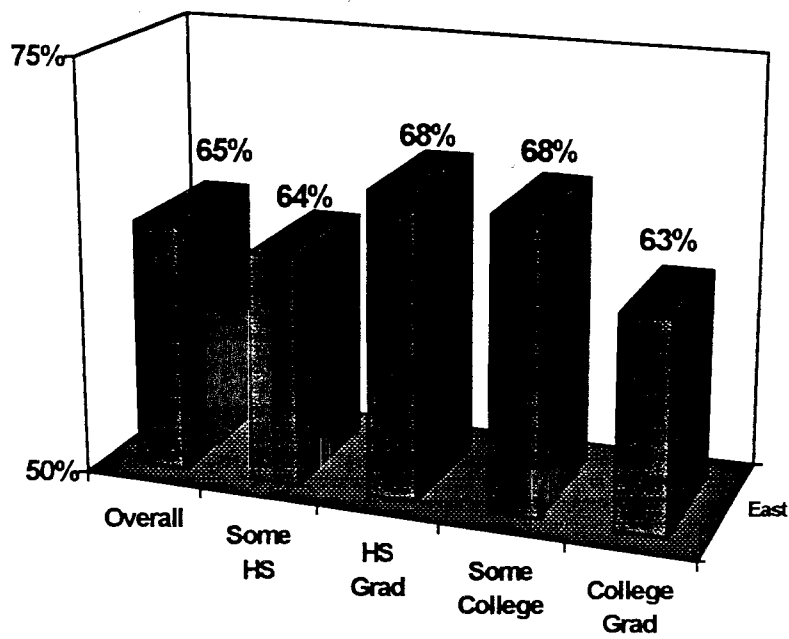


Figure 4b. shows respondents with great concern as related to level of education. Environmental concern is rather high among all education groups.

## ECONOMY, ENVIRONMENT OR BOTH?

**Figure 5.**

Now I'll ask you a few questions about the environment. Here are two statements that people sometimes make when discussing the environment and economic growth. Which of these statements comes closer to your own point of view? One: Economic growth should be given priority, even if the environment suffers to some extent. Two: Protection of the environment should be given priority, even if economic growth suffers to some extent. Or, Three: We can have economic growth and environmental protection at the same time.

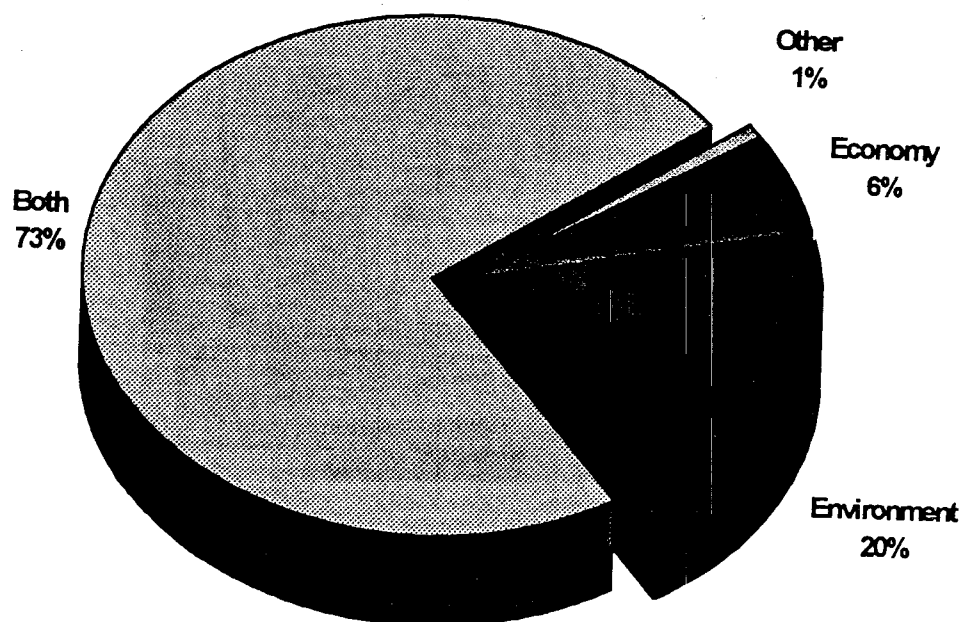


Figure 5. shows six percent of the respondents feel that economic growth should be given priority. One fifth of the respondents (20%) feel that environmental protection should be given priority. Almost three fourths (73%) feel that we can have both economic growth and environmental protection at the same time. (N=799)

Table 2. Now I'll ask you a few questions about the environment. Here are three statements that people sometimes make when discussing the environment and economic growth. Which of these statements comes closer to your own point of view? One: Economic growth should be given priority, even if the environment suffers to some extent. Two: Protection of the environment should be given priority, even if economic growth suffers to some extent. Or, Three: We can have economic growth and environmental protection at the same time.

	Economic growth should be given priority	Environmental protection should be given priority	Both economic growth and environmental protection	Depends	Neither	Don't Know	Total	(N)
<b>Total</b>	6%	20%	74%	--	--	1%	101%	N=799
<b>Gender</b>								
Male	8	19	72	---	---	1		398
Female	4	20	76	---	---	1		399
<b>Age</b>								
18-35	6	17	77	---	---	---		308
36-60	6	21	73	---	---	---		295
61+	5	21	70	1	1	2		176
<b>Income</b>								
Under \$30K	8	21	71	---	---	1		277
\$30K-\$60K	4	19	76	---	---	---		298
Over \$60K	7	18	75	---	---	---		155
Don't Know/Refused	5	20	73	1	---	2		69
<b>Education</b>								
Some HS	6	18	77	---	---	---		46
HS Grad	11	21	66	---	---	1		111
Some College	6	20	74	---	---	---		217
College Grad(4Yr)	5	20	75	---	---	1		413
<b>Place of Residents</b>								
Big City	7	21	72	---	---	1		267
Suburbs	3	19	78	---	---	1		254
Small City/Town	8	20	72	---	---	---		223
Farm/Country Home	14	22	65	---	---	---		48
<b>Occupation</b>								
Self Employed Small Business	11	16	73	---	---	---		70
White Collar Professional/managerial	5	19	76	---	---	---		243
Sales/Service Operational	11	24	65	---	---	---		132
Other	---	21	79	---	---	---		24
Don't Know/Refused	9	28	63	---	---	---		8
<b>Own/Rent Home</b>								
Rent	7	19	73	--	---	---		213
Own	6	19	74	---	---	1		542
Neither	3	26	71	---	---	---		33
Don't Know/Refused	---	19	81	---	---	---		12
<b>Children Living at Home</b>								
Kids at home	6	21	74	---	---	---		288
No Kids at Home	6	19	74	---	---	1		512

## REACTION TO PRO-ENVIRONMENT STATEMENTS

**Figure 6.**

And now I'd like to read you a set of statements regarding the environment. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each statement.

Figure 6a. The environment is an interconnected whole. If you alter any one part, many other parts are affected.

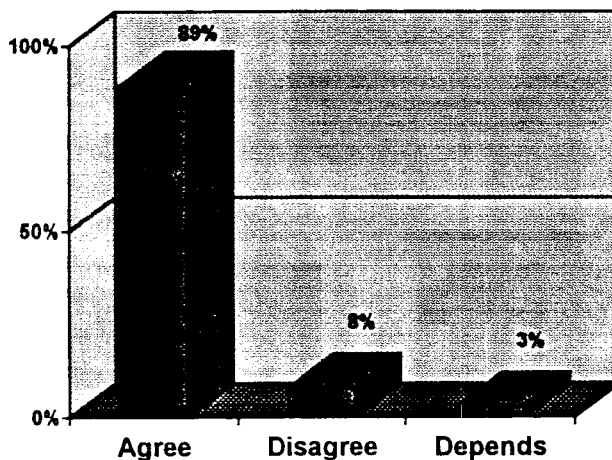


Figure 6a. Shows that almost 9 out of 10 respondents (89%) agree that the environment is an interconnected whole, and if you alter any one part, many other parts are affected. Only eight percent of the respondents disagreed with the Statement, and three percent of the respondents said they were Not sure or that it depends.

**Figure 6b.**

We must protect the environment even if it means that some jobs in the local community are lost.

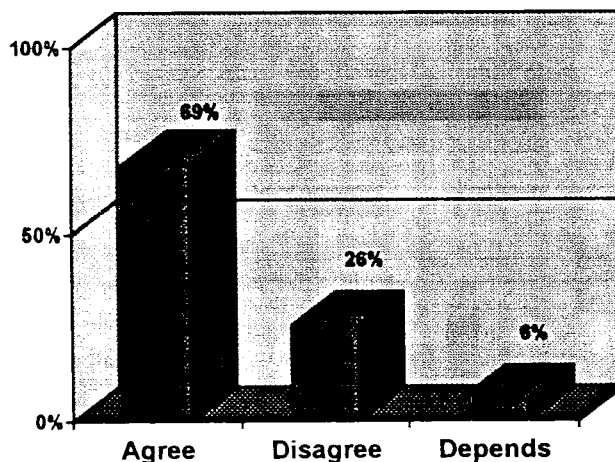


Figure 6b. Shows that 69% of respondents agree that we must protect the environment even if it means some jobs in the local community are lost. Over one quarter of the respondents (26%) disagreed with the Statement, and six percent of the respondents said they were Not sure or that it depends.

## REACTION TO PRO-ENVIRONMENT STATEMENTS (continued)

**Figure 6c.**

We have to protect the environment for our children and our grandchildren even if it means reducing our standard of living today.

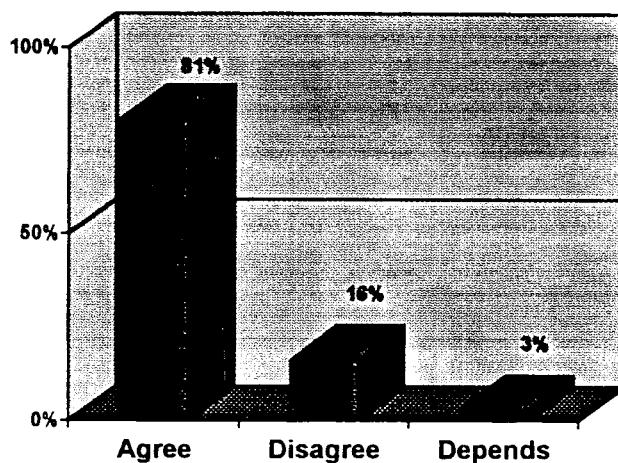


Figure 6c. Shows that 8 out of 10 respondents (81%) agree that we have to protect the environment for our children and our grandchildren even if it means reducing our standard of living today. Only 16% of the respondents disagreed with the Statement, and three percent of the respondents said they were Not sure or that it depends.

## REACTION TO PRO-ECONOMIC GROWTH STATEMENTS

**Figure 7a.** My first duty is to provide for myself and my family. Protecting the environment has to come after that.

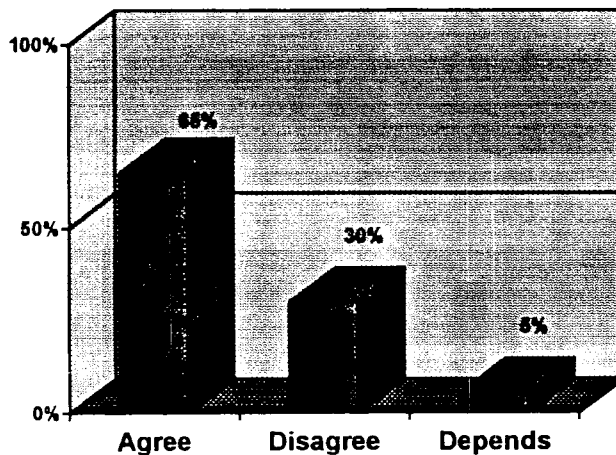


Figure 7a. Shows that 65% of the respondents agree with this statement. Almost a third (30%) of the respondents disagreed with the statement, and 5% of the respondents said they were not sure about this statement or that it depends.

**Figure 7b.** We can have a thriving economy even if we do not protect the environment.

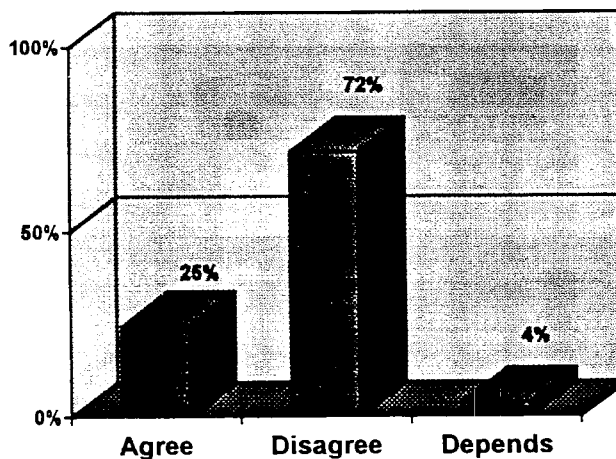


Figure 7b. Shows that one fourth (25%) of the respondents agree with that we can have a thriving economy even if we do not protect the environment. Almost three quarters (72%) of the respondents disagreed with the statement, and only 4 percent of the respondents stated that they were not sure we can have a thriving economy without environmental protection or that it depends.

## REACTION TO PRO-ECONOMIC GROWTH STATEMENTS (continued)

**Figure 7c.** The purpose of plants and animals is to serve the needs of human beings. If something doesn't help human life, we don't need to protect it.

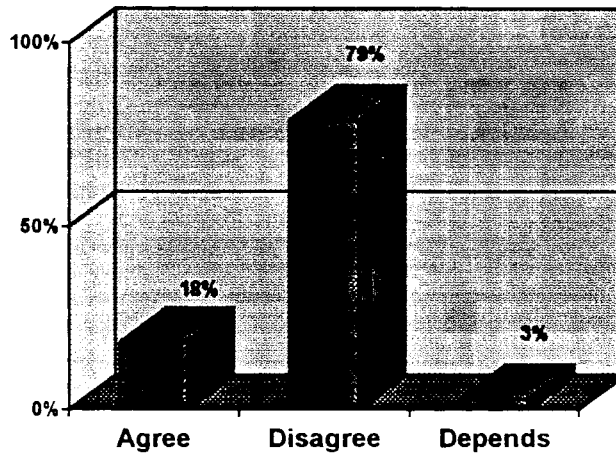


Figure 7c. Shows that almost one fifth (18%) agree that the purpose of plants and animals is to serve the needs of human beings. Over three quarters of the respondents (79%) disagree with this statement, and only 3 percent of the respondents stated that they were not sure or that it depends.

And now I'd like to read you a set of statements regarding the environment. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each statement.

Table 3. The environment is an interconnected whole. If you alter any one part, many other parts are affected.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	54%	35%	6%	2%	3%	100%	N=799
<b>Gender</b>							
Male	54	36	5	3	2		398
Female	54	35	6	2	4		399
<b>Age</b>							
18-35	54	35	6	3	1		308
36-60	55	36	4	3	2		295
61 +	53	34	7	1	5		176
<b>Income</b>							
Under \$30K	56	34	4	3	3		277
\$30K-\$60K	56	34	7	3	1		298
Over \$60K	48	44	6	2	2		155
Don't Know/Refused	52	31	8	---	9		69
<b>Education</b>							
Some HS	41	36	9	6	8		46
HS Grad	48	41	4	4	4		111
Some College	59	33	6	1	2		217
College Grad(4Yr)	55	35	5	2	3		413
<b>Place of Residents</b>							
Big City	52	37	5	3	3		267
Suburbs	54	35	5	3	3		254
Small City/Town	56	35	6	1	3		223
Farm/Country Home	55	28	9	2	5		48
<b>Occupation</b>							
Self Employed Small Business	51	43	4	2	---		70
White Collar Professional/managerial	54	38	6	2	1		243
Sales/Service Operational	60	27	5	3	5		132
Other	55	40	5	---	---		24
Don't Know/Refused	26	74	---	---	---		8
<b>Own/Rent Home</b>							
Rent	57	33	5	3	3		213
Own	52	37	6	2	3		542
Neither	64	25	8	---	4		33
Don't Know/Refused	46	21	5	19	9		12
<b>Children Living at Home</b>							
Kids at home	56	36	6	1	1		288
No Kids at Home	53	35	6	3	4		512

Table 4. The purpose of plants and animals is to serve the needs of human beings. If something doesn't help human life, we don't need to protect it.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	7%	11%	25%	54%	3%	100%	N=795
<b>Gender</b>							
Male	8	13	31	46	3		395
Female	6	9	20	62	3		398
<b>Age</b>							
18-35	6	11	26	57	1		308
36-60	7	10	25	55	3		292
61 +	8	15	23	47	6		175
<b>Income</b>							
Under \$30K	10	12	20	56	2		276
\$30K-\$60K	5	10	28	54	3		298
Over \$60K	7	12	28	50	2		153
Don't Know/Refused	5	12	30	49	5		69
<b>Education</b>							
Some HS	7	12	30	49	1		45
HS Grad	19	12	22	45	2		111
Some College	5	9	24	60	3		216
College Grad(4Yr)	6	11	26	54	3		410
<b>Place of Residents</b>							
Big City	8	10	27	53	3		267
Suburbs	6	11	23	58	3		252
Small City/Town	9	12	24	52	3		222
Farm/Country Home	8	15	29	47	2		46
<b>Occupation</b>							
Self Employed Small Business	10	16	19	54	2		68
White Collar Professional/managerial	5	11	26	57	---		242
Sales/Service Operational	10	6	22	60	3		132
Other	10	14	40	31	6		24
Don't Know/Refused	9	---	46	45	---		8
<b>Own/Rent Home</b>							
Rent	5	9	25	59	2		213
Own	7	12	26	51	3		538
Neither	14	15	13	58	---		33
Don't Know/Refused	24	8	17	51	---		12
<b>Children Living at Home</b>							
Kids at home	7	10	28	52	3		287
No Kids at Home	7	12	23	55	3		508

Table 5. We must protect the environment even if it means that some jobs in the local community are lost.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	27%	42%	17%	9%	6%	101%	N=799
<b>Gender</b>							
Male	29	40	18	10	4		398
Female	25	44	16	8	7		398
<b>Age</b>							
18-35	27	45	16	7	4		308
36-60	27	40	18	11	4		295
61 +	28	39	14	10	9		175
<b>Income</b>							
Under \$30K	33	40	13	9	6		277
\$30K-\$60K	25	45	17	8	5		298
Over \$60K	22	41	23	12	3		155
Don't Know/Refused	22	40	17	9	12		68
<b>Education</b>							
Some HS	32	32	20	13	4		46
HS Grad	32	39	19	8	2		111
Some College	28	44	15	8	5		217
College Grad(4Yr)	25	43	16	10	7		413
<b>Place of Residents</b>							
Big City	28	45	13	7	7		267
Suburbs	28	40	19	5	7		254
Small City/Town	23	43	18	14	3		223
Farm/Country Home	32	27	18	19	4		47
<b>Occupation</b>							
Self Employed Small Business	19	40	26	10	5		70
White Collar Professional/managerial	25	44	21	7	4		243
Sales/Service Operational	33	42	11	11	4		132
Other	38	31	---	18	13		24
Don't Know/Refused	17	56	13	---	13		8
<b>Own/Rent Home</b>							
Rent	30	45	11	8	6		213
Own	25	41	19	10	6		542
Neither	33	41	14	6	6		33
Don't Know/Refused	41	54	---	5	---		12
<b>Children Living at Home</b>							
Kids at home	24	41	20	11	5		288
No Kids at Home	29	43	15	8	6		511

Table 6. My first duty is to provide for myself and my family. Protecting the environment has to come after that.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	29%	35%	20%	10%	5%	99%	N=797
<b>Gender</b>							
Male	35	33	17	10	6		398
Female	24	38	22	11	5		397
<b>Age</b>							
18-35	29	43	18	8	3		305
36-60	27	34	20	13	7		295
61 +	32	26	22	13	8		176
<b>Income</b>							
Under \$30K	31	34	18	11	7		275
\$30K-\$60K	28	37	19	11	4		298
Over \$60K	28	37	21	10	4		155
Don't Know/Refused	31	32	23	6	9		69
<b>Education</b>							
Some HS	34	28	19	11	8		46
HS Grad	34	34	19	10	3		111
Some College	29	33	21	11	7		217
College Grad(4Yr)	28	38	19	10	5		411
<b>Place of Residents</b>							
Big City	25	33	20	16	6		266
Suburbs	26	39	20	10	6		253
Small City/Town	35	35	20	6	4		223
Farm/Country Home	46	31	14	8	2		48
<b>Occupation</b>							
Self Employed Small Business	36	36	18	4	6		70
White Collar Professional/managerial	29	37	20	10	4		242
Sales/Service Operational	30	36	16	14	4		131
Other	23	25	31	3	19		24
Don't Know/Refused	23	49	19	9	---		8
<b>Own/Rent Home</b>							
Rent	27	40	17	11	6		210
Own	31	33	20	11	6		542
Neither	28	33	36	3	---		33
Don't Know/Refused	18	58	25	---	---		12
<b>Children Living at Home</b>							
Kids at home	31	39	19	7	5		286
No Kids at Home	28	33	20	13	6		511

Table 7. We have to protect the environment for our children and our grandchildren even if it means reducing our standard of living today.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	46%	35%	11%	6%	3%	101%	N=799
<b>Gender</b>							
Male	41	34	15	7	3		398
Female	50	37	7	4	3		398
<b>Age</b>							
18-35	48	35	10	4	4		308
36-60	46	35	10	6	3		294
61 +	43	36	12	7	2		176
<b>Income</b>							
Under \$30K	52	32	11	3	3		276
\$30K-\$60K	43	40	9	7	2		298
Over \$60K	39	33	14	9	5		155
Don't Know/Refused	45	38	8	5	4		69
<b>Education</b>							
Some HS	44	41	4	9	2		46
HS Grad	50	28	14	3	4		111
Some College	46	35	11	6	3		217
College Grad(4Yr)	45	37	10	6	3		412
<b>Place of Residents</b>							
Big City	49	39	6	4	1		266
Suburbs	43	34	12	6	6		254
Small City/Town	45	34	14	5	2		223
Farm/Country Home	45	34	11	10	---		48
<b>Occupation</b>							
Self Employed Small Business	48	32	17	3	---		70
White Collar Professional/managerial	42	37	10	8	3		243
Sales/Service Operational	56	34	3	5	2		132
Other	37	46	12	---	4		24
Don't Know/Refused	19	67	13	---	---		8
<b>Own/Rent Home</b>							
Rent	45	37	10	4	3		212
Own	46	34	10	7	3		542
Neither	36	38	26	---	---		33
Don't Know/Refused	54	30	---	8	8		12
<b>Children Living at Home</b>							
Kids at home	47	36	8	6	2		288
No Kids at Home	45	35	12	5	3		511

Table 8. We can have a thriving economy even if we do not protect the environment.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	8%	16%	27%	44%	4%	99%	N=798
<b>Gender</b>							
Male	12	21	25	39	5		398
Female	5	12	30	50	3		398
<b>Age</b>							
18-35	10	17	27	44	2		308
36-60	7	16	27	47	4		294
61 +	8	15	27	42	8		175
<b>Income</b>							
Under \$30K	11	16	21	48	5		277
\$30K-\$60K	4	15	32	46	3		297
Over \$60K	14	17	30	35	3		155
Don't Know/Refused	5	20	26	44	6		69
<b>Education</b>							
Some HS	14	18	20	47	1		46
HS Grad	6	21	25	42	5		111
Some College	8	11	30	48	3		215
College Grad(4Yr)	9	17	27	43	4		413
<b>Place of Residents</b>							
Big City	9	17	27	44	4		267
Suburbs	8	14	31	44	3		253
Small City/Town	8	19	26	44	4		223
Farm/Country Home	13	11	18	52	6		48
<b>Occupation</b>							
Self Employed Small Business	9	24	27	37	4		70
White Collar Professional/managerial	9	17	30	41	4		243
Sales/Service Operational	10	17	23	49	2		132
Other	---	16	45	39	---		24
Don't Know/Refused	---	9	55	36	---		8
<b>Own/Rent Home</b>							
Rent	12	15	24	47	3		213
Own	7	16	29	44	4		541
Neither	9	19	28	41	3		33
Don't Know/Refused	---	45	13	43	---		12
<b>Children Living at Home</b>							
Kids at home	7	13	35	43	3		287
No Kids at Home	9	18	23	45	5		511

Table 9.

## Value Orientations

## Dimension 1 Environment

Pro-Environment	73%	N=755
Others	<u>27%</u>	
Total	100%	

## Dimension 2 Utilitarianism

Utilitarian	15%	N=777
Others	<u>85%</u>	
Total	100%	

## Dimension 3 Economic Growth

Pro-Growth	88%	N=791
Others	<u>12%</u>	
Total	100%	

## CONCERNS

The second component of the Public Values Survey of the Arizona Comparative Environmental Risk Project sought to identify the level of concern Arizonans feel regarding environmental quality. This component consisted of two groups of questions. The first focused on respondents' perceptions of the quality of their immediate environment and its impact on their health. The second group of questions asked respondents to rate their level of concern regarding twenty specific environmental issues. The issues covered in this section were derived from the "issues list" created by the Human Health, Ecosystems, and Quality of Life technical committees of the Arizona Comparative Environmental Risk project. The rating technique used allows us to rank the importance of each issue for the respondent population.

Initial focus group findings indicated that, for many people, their concerns with environmental quality center around the possible negative health effects of environmental degradation. To further examine this concern, the survey asked respondents whether they thought the environment in their local communities is good for their health, bad for their health, or does not affect their health at all. The public was almost evenly split between those who believed that their local environment was good for their health (37%), and those who responded they thought it was bad for their health (32%). From a statistical standpoint, there was no meaningful difference in the size of these two groups. The remainder, one in five respondents (21%), said the environment does not affect their health at all (See Figure 1 and Table 1).

Older Arizonans were more likely to say the environment was good for their health than younger ones. Forty-eight percent (48%) of respondents over sixty years of age rated the environment as good for their health. By contrast, only 28% of those between 18 and 35 rated the environment's impact on their health as positive. It is likely that this difference reflects the many over-60 respondents who are retirees and who have moved to Arizona specifically for the benefits of its climate. Higher income respondents and those with higher education were somewhat more also somewhat more likely to rate the environment as good for their health. Forty-percent (40%) of those with incomes over \$60,000 annually rated the environment as positive as compared to 53 percent of those with incomes under \$35,000. Similarly, 40% of college graduates rated the health impact of the environment positively, as compared to 34% of high school graduates.

The most striking, although predictable, factor influencing perception of the environment's health impact concerned area of residence. Fully 69% of those who lived in the country rated the environment as good for their health. By contrast, only 24% of those living in cities, and 30% of those living in suburbs rated the environment as good for their health. (See Table 1)

The previous question asked respondents only about the current impact of the environment on their health. In order to tap perceptions of changes in environmental health effects respondents were asked to indicate whether the environment has gotten better or worse for their health over the past five years. Most respondents (51%) said this relationship has not changed over the past five years (See Figure 2 and Table 2). A third of respondents (34%) said the environment has gotten worse for their health over the past five years. Only 9 percent

reported that the environment had gotten better for their health. Women (39%), younger respondents (40%) and people with some college education (41%) are most likely to report that the environment has become worse for their health.

A major component of the Public Values Survey was to identify public levels of concern regarding specific environmental issues that the technical committees of the Arizona Environmental Risk Project had identified as posing risks to Arizonans. For each of these twenty issues respondents were asked to indicate their level of concern on a scale from 1 to 5, with 1 meaning the topic is of no concern, and 5 indicating the issue is of great concern. Mean levels of concern were derived from this series of question and a priority ranking of levels of concern was generated. (See Figure 3 and Tables 3 to 22)

The issue of greatest concern to the Arizona adult population is the availability of safe drinking water (mean=4.55). The second highest ranked issue is the quality of drinking water (mean=4.43). Other issues that generated high levels of concern were the disposal of hazardous wastes (mean=4.42), outdoor air quality (mean=4.26), and the condition of forests, deserts and other natural areas (mean=4.20). The Arizonans surveyed recorded the lowest levels of concern for natural hazards (mean = 3.13), global warming (mean = 3.24), pollens and other allergens (mean = 3.26) and radon (mean = 3.46).

Figure 3 ranks the concern levels for all twenty issues, and Tables 3 through 22 details how these concern levels vary according to gender, age, income, education, place of residence, occupation, owning vs. renting, and whether there are children living at home. For every one of the twenty environmental issues women were more likely to express "great concern" than men. The proportion of women expressing great concern was ten percentage points higher than for men for the issues of outdoor air quality (15% higher), drinking water availability (14% higher), disposal of garbage (16% higher), second-hand tobacco smoke (11% higher), radon (12% higher), exposure to pesticides and chemicals at work (11% higher), pollens and allergens (13% higher), pesticides and chemicals in food (12% higher), and ultraviolet radiation (11% higher). These findings suggest that women in Arizona tend to feel more vulnerable to environmental risks than do men. It should be noted, however, that while the proportion of women expressing "great concern" generally exceeds that of men, for 11 of the 20 issues surveyed 40% or more the *men* indicated "great concern."

In general Arizonans living in rural areas were less likely to express "great concern" regarding specific environmental issues than those living in more urbanized locales. The one notable exception was population growth. Fifty-seven percent (57%) of those living in rural places indicated the felt "great concern" over population growth, while those living in suburbs, small towns, and big cities fell into the 30% range.

There were also some differences in concern levels by occupation. In general, blue-collar and sales workers tended to be somewhat more likely to express "great concern" regarding specific issues than were the self-employed; small business owners, and white collar and managerial workers. Arizona's lunch bucket workers were particularly concerned about the disposal of hazardous wastes (78% indicating great concern), the conditions of forests,

deserts and other natural areas (60% indicating great concern), and exposure to poisons from spills (44% indicating great concern).

Having children living at home appeared to increase slightly the proportion of individuals who expressed great concern regarding the specific issues, although in most cases the differences were slight. However, the proportion indicating "great concern" was 5 percentage points or more higher for those with children living for the issues of population growth, bacteria and organisms in food, exposure to chemicals and pesticides at work, pollens and allergens, pesticides and chemicals in food, exposure to poisons from spills.

## QUALITY OF THE ENVIRONMENT: IMPACT ON HEALTH

Figure 1.

When you think about the air you breathe, the water you drink, and the overall quality of the environment, would you say the community in which you live is good for your health, bad for your health, or doesn't affect your health at all?

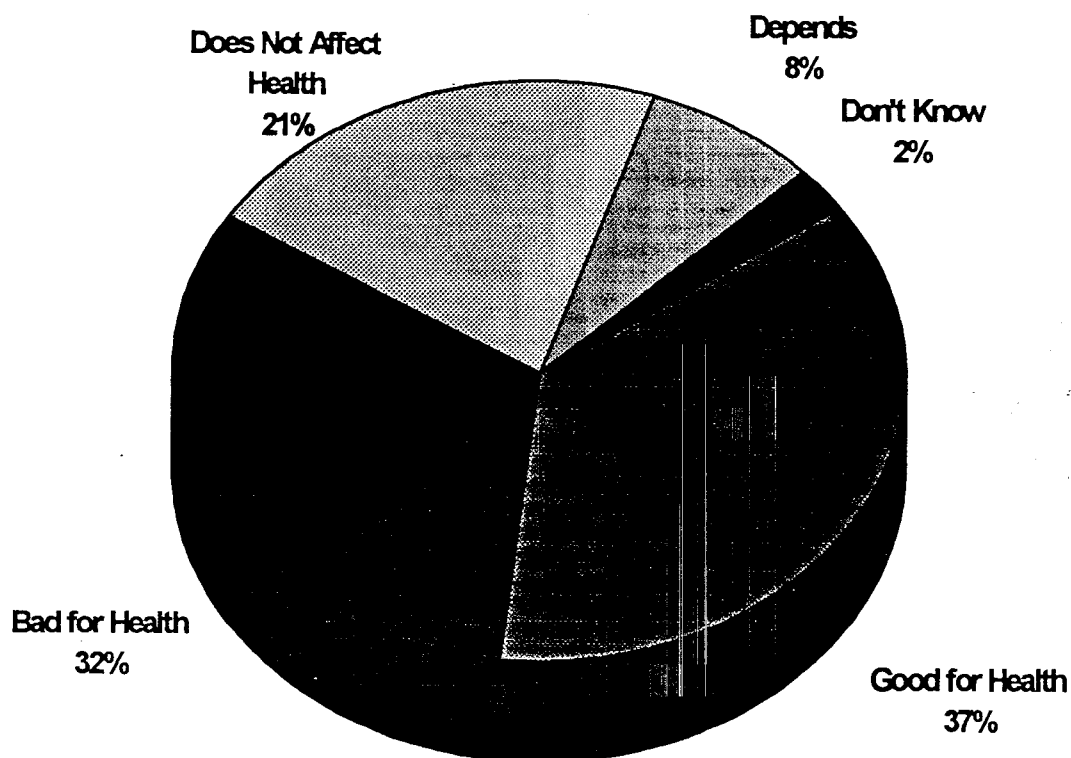


Figure 1. (N=799) Shows that over one third of the respondents (37%) feel that the overall quality in the community they live in is good for their health. Just under one third of the respondents (32%) believe that the overall quality of the environment in the community they live in is bad for their health. Just over one fifth (21%) feel that the overall quality in the community they live in does not affect their health at all. Eight percent say it depends, while two percent say they don't know.

**Table 1.** When you think about the air you breathe, the water you drink, and the overall quality of the environment, would you say the community in which you live is good for your health, bad for your health, or doesn't affect your health at all?

	Good for health	Bad for health	Doesn't affect health at all	Depends	Don't know	Total	(N)
<b>Total</b>	37%	32%	21%	8%	2%	100%	N=799
<b>Gender</b>							
Male	38	30	24	6	2		398
Female	35	34	18	10	2		399
<b>Age</b>							
18-35	28	40	23	7	2		308
36-60	38	29	21	9	3		295
61 +	48	22	19	7	4		176
<b>Income</b>							
Under \$30K	35	39	17	7	2		277
\$30K-\$60K	39	28	21	10	2		298
Over \$60K	40	27	26	4	3		155
Don't Know/Refused	26	33	26	11	4		69
<b>Education</b>							
Some HS	38	32	14	13	3		46
HS Grad	34	32	22	10	2		111
Some College	32	36	22	8	2		217
College Grad(4Yr)	40	29	22	6	3		413
<b>Place of Residents</b>							
Big City	24	38	27	9	3		267
Suburbs	30	34	24	10	2		254
Small City/Town	52	26	15	4	3		223
Farm/Country Home	69	13	7	12	---		48
<b>Occupation</b>							
Self Employed Small Business	29	20	36	9	6		70
White Collar Professional/managerial	31	39	21	9	1		243
Sales/Service Operational	34	34	23	8	1		132
Other	44	26	13	8	10		24
Don't Know/Refused	9	42	36	13	---		8
<b>Own/Rent Home</b>							
Rent	27	46	17	7	3		213
Own	40	27	22	8	2		542
Neither	31	22	30	16	2		33
Don't Know/Refused	41	29	30	---	---		12
<b>Children Living at Home</b>							
Kids at home	35	34	21	8	2		288
No Kids at Home	37	31	22	8	3		512

## QUALITY OF THE ENVIRONMENT: CHANGE OVER TIME

**Figure 2.**

Over the last five (5) years, would you say the community in which you live has become better for your health, worse for your health, or hasn't changed your health at all?

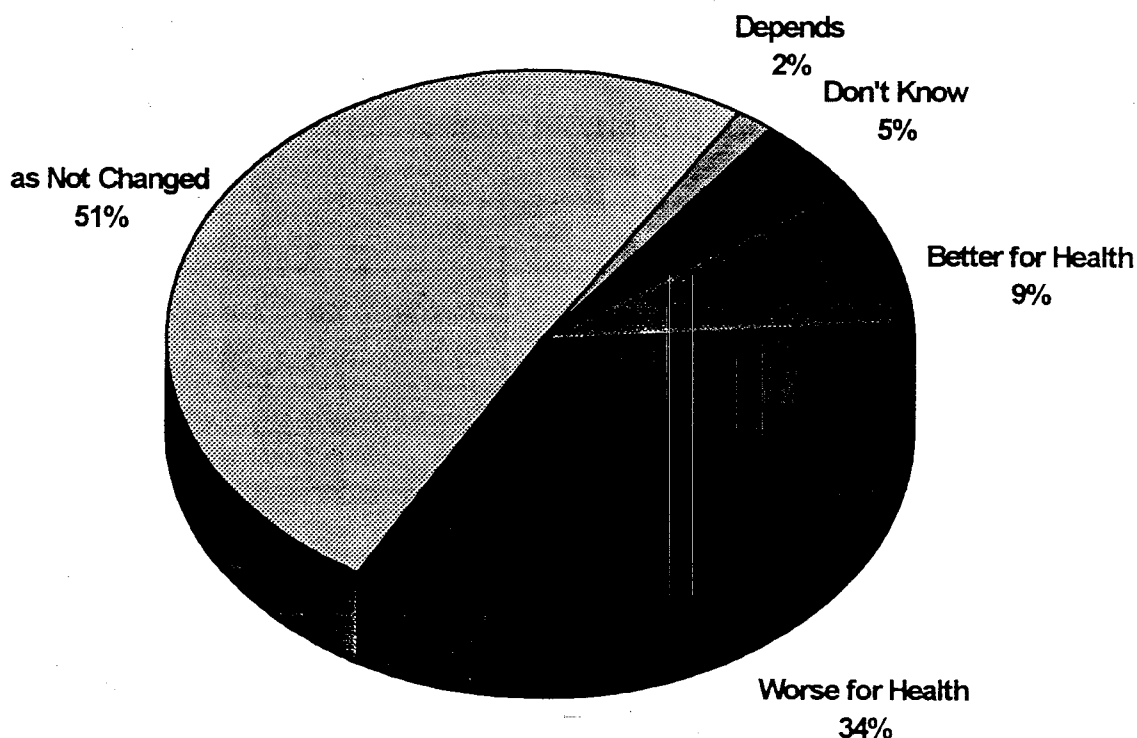


Figure 2. (N=799) Shows that nine percent of the respondents feel that over time the community in which they live has become better for their health. Over one third of the respondents (34%) feel that over time the community in which they live has become worse for their health. Just over half of the respondents (51%) feel that over time the community in which they live has not changed their health.. Five percent say they don't know, while two percent say that it depends.

**Table 2.** Over the last five (5) years, would you say the community in which you live has become better for your health, worse for your health, or hasn't changed at all?

	Better for your health	Worse for your health	Hasn't changed	Depends	Don't know	Total	(N)
<b>Total</b>	9%	34%	51%	2%	5%	101%	N=799
<b>Gender</b>							
Male	10	30	55	1	5		398
Female	8	39	47	2	5		399
<b>Age</b>							
18-35	7	40	47	1	5		308
36-60	9	33	53	2	4		295
61 +	12	27	54	2	5		176
<b>Income</b>							
Under \$30K	12	33	48	2	5		277
\$30K-\$60K	6	35	52	1	5		298
Over \$60K	9	32	53	1	5		155
Don't Know/Refused	4	41	53	---	2		69
<b>Education</b>							
Some HS	15	22	63	---	---		46
HS Grad	11	30	54	1	4		111
Some College	8	41	45	1	5		217
College Grad(4Yr)	8	33	52	2	5		413
<b>Place of Residents</b>							
Big City	9	43	43	2	4		267
Suburbs	8	37	46	1	7		254
Small City/Town	9	23	63	1	4		223
Farm/Country Home	11	17	67	5	---		48
<b>Occupation</b>							
Self Employed Small Business	10	25	61	2	2		70
White Collar Professional/managerial	7	38	51	1	4		243
Sales/Service Operational	12	38	43	2	5		132
Other	--	33	58	---	9		24
Don't Know/Refused	---	37	55	---	8		8
<b>Own/Rent Home</b>							
Rent	11	37	45	1	6		213
Own	8	33	63	2	5		542
Neither	4	27	68	---	2		33
Don't Know/Refused	---	66	34	---	---		12
<b>Children Living at Home</b>							
Kids at home	10	33	53	---	5		288
No Kids at Home	8	35	50	2	5		512

## LEVELS OF CONCERN FOR ENVIRONMENTAL TOPICS

**Figure 3.**

Now I'm going to read you a list of environmental topics about which some Arizonans are concerned. I would like you to tell me how concerned you are about each topic. Please rate your level of concern on a scale from 1 to 5, where a '1' means this issue is of no concern to you, and a '5' means the topic is of great concern to you.

- The Air you Breath Outdoors
- The Quality of Rivers, Lakes and Streams
- Disposal of Hazardous Waste
- Conditions of fish, game and wildlife
- Population Growth in the State
- Bacteria and Organisms in your food
- Availability of Safe Drinking Water in the Future
- Disposal of Garbage and Other Household Wastes
- Tobacco Smoke Inside Buildings
- Radon in Building
- Exposures to Chemicals or Pesticides While Working
- Pollens and Other Things in the Air That Some People Are Allergic To
- The Quality of the Water you Drink
- Pesticides and Chemicals In Your Food
- The Condition of Forests, Deserts, and other natural areas
- Natural Hazards like Floods, Earthquakes and Forest Fires
- Exposure to Poisons from Spills, Fires and other Accidents
- Condition of Important Historic Places such as Historic Buildings or Ancient Ruins
- Ultraviolet Radiation From the Sun
- Global Warming

Figure 3. (continued)

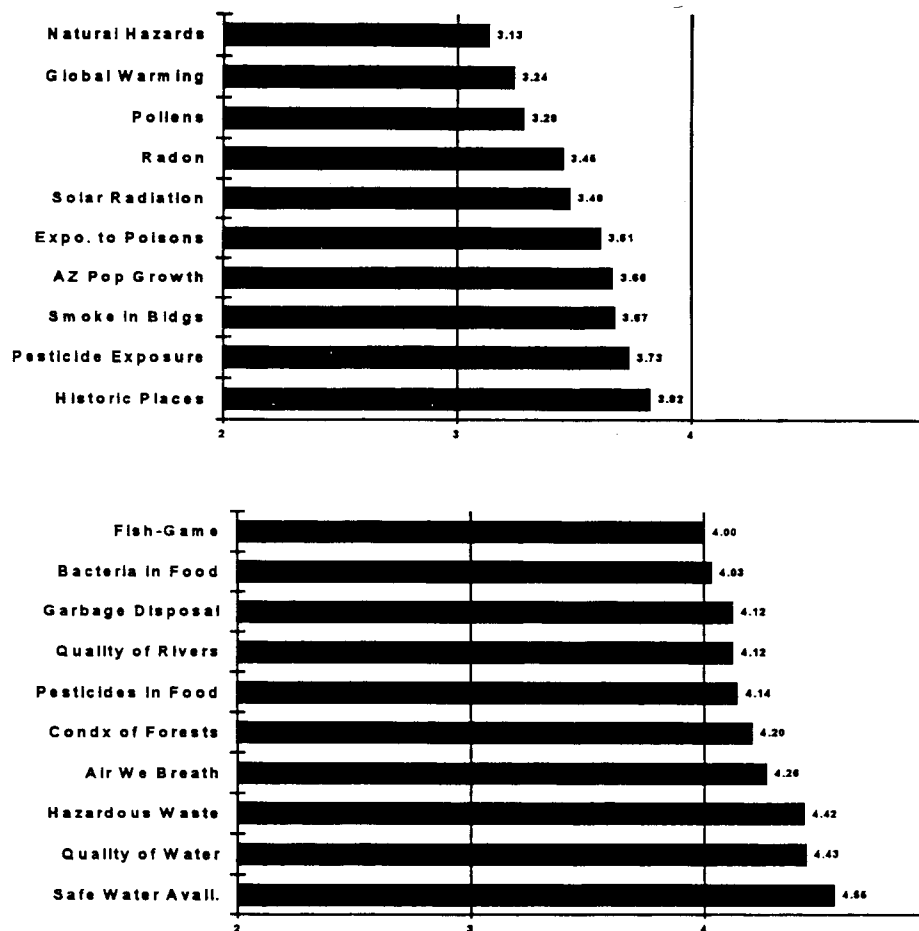


Figure 3. Shows that out of a list of environmental topics presented to Arizona residents; availability of safe drinking water in the future was reported as being of most concern (Mean of 4.55). This was followed by the quality of the water you drink (Mean of 4.43). Then we have disposal of hazardous waste with (Mean of 4.42), the air you breath outdoors (Mean of 4.26), the condition of forests, deserts, and other natural areas (Mean of 4.20), and pesticides and chemicals In Your Food (Mean of 4.14) making up the middle four areas of concern. Finally we have the quality of rivers, lakes and streams with a (Mean of 4.12), disposal of garbage and other household wastes (Mean of 4.12), bacteria and organisms in your food (Mean of 4.03), and conditions of fish, game and wildlife (Mean of 4.00) Making up the last for areas of concern. Note: All of these Environmental topics are a Mean of 4.00 or better making the level of concern for these topics high. This figure also demonstrates that out of a list of environmental topics presented to Arizona residents; condition of important historic places such as historic buildings or ancient ruins was reported as being of at least moderate concern (Mean of 3.82). This was followed by exposures to chemicals or pesticides while working (Mean of 3.73). Then we have tobacco smoke inside buildings with (Mean of 3.67), population growth in the state (Mean of 3.66), exposure to poisons from spills, fires and other accidents (Mean of 3.61), and ultraviolet radiation from the sun (Mean of 3.48) making up the middle four areas of concern. Finally we have radon in buildings with a (Mean of 3.45), pollens and other things in the air that some people are allergic to (Mean of 3.28), global warming (Mean of 3.24), and natural hazards like floods, earthquakes and forest fires (Mean of 3.13) Making up the last for areas of concern. Note: All of these Environmental topics are a Mean of 3.00 or better making the level of concern for these topics at least of moderate concern or better.

Now I'm going to read you a list of environmental topics that some Arizonans are concerned about. I would like you to tell me how concerned you are about each topic. Please rate your level of concern on a scale from 1 to 5, where a '1' means this topic is of no concern to you at '5' means the topic is of great concern to you.

Table 3. The Air You Breath Outdoors

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	4%	5%	13%	18%	60%	---	100%	N=799
<b>Gender</b>								
Male	5	7	14	20	53	---		398
Female	3	3	11	16	68	---		398
<b>Age</b>								
18-35	3	5	12	21	60	---		308
36-60	3	6	15	17	60	---		295
61 +	7	5	11	14	63	---		175
<b>Income</b>								
Under \$30K	4	5	12	18	61	---		277
\$30K-\$60K	4	5	15	19	57	---		298
Over \$60K	3	8	13	19	57	---		155
Don't Know /Refused	6	1	2	15	76	---		69
<b>Education</b>								
Some HS	1	4	11	13	71	---		45
HS Grad	3	2	12	17	67	---		111
Some College	3	4	11	21	61	---		217
College Grad(4Yr)	5	7	13	18	57	---		413
<b>Place of Residents</b>								
Big City	3	2	12	21	63	---		267
Suburbs	3	7	15	18	57	---		253
Small City/Town	5	5	10	17	64	---		223
Farm/Country Home	9	13	13	19	45	---		48
<b>Occupation</b>								
Self Employed Small Business	4	8	10	21	57	---		70
White Collar Professional/managerial	4	6	14	21	55	---		243
Sales/Service Operational	2	4	13	20	61	---		132
Other	9	---	15	26	49	---		24
Don't Know /Refused	---	---	9	19	71	---		8
<b>Own/Rent Home</b>								
Rent	4	4	13	18	62	---		213
Own	4	6	13	18	59	---		542
Neither	3	2	7	33	55	---		33
Don't Know /Refused	---	---	8	---	92	---		12
<b>Children Living at Home</b>								
Kids at home	4	6	12	17	62	---		288
No Kids at Home	4	5	13	19	59	---		511

Table 4. The Quality Of Rivers, Lakes And Streams

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	4%	3%	21%	22%	49%	2%	101%	N=799
<b>Gender</b>								
Male	5	5	23	20	48	---		393
Female	3	1	19	25	52	---		388
<b>Age</b>								
18-35	3	2	22	25	48	---		307
36-60	4	3	19	23	52	---		293
61 +	5	3	24	17	51	---		164
<b>Income</b>								
Under \$30K	5	1	22	19	53	---		269
\$30K-\$60K	4	4	17	25	50	---		296
Over \$60K	1	5	26	23	45	---		152
Don't Know /Refused	2	1	23	24	50	---		67
<b>Education</b>								
Some HS	12	1	16	16	56	---		43
HS Grad	5	3	18	19	56	---		108
Some College	3	2	23	21	52	---		214
College Grad(4Yr)	3	3	21	25	47	---		407
<b>Place of Residents</b>								
Big City	4	2	22	26	46	---		258
Suburbs	2	4	20	26	48	---		251
Small City/Town	5	2	21	16	56	---		221
Farm/Country Home	4	8	22	15	52	---		47
<b>Occupation</b>								
Self Employed Small Business	1	3	23	20	53	---		70
White Collar Professional/managerial	2	4	21	27	45	---		241
Sales/Service Operational	2	4	21	17	56	---		131
Other	9	---	18	20	53	---		24
Don't Know /Refused	---	---	13	57	30	---		8
<b>Own/Rent Home</b>								
Rent	3	3	22	21	52	---		208
Own	4	3	21	23	47	---		532
Neither	7	---	9	25	59	---		32
Don't Know /Refused	---	---	28	22	51	---		12
<b>Children Living at Home</b>								
Kids at home	3	3	20	23	52	---		286
No Kids at Home	4	3	22	23	49	---		498

Table 5. Disposal Of Hazardous Wastes

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	3%	4%	10%	13%	68%	2%	100%	N=799
<b>Gender</b>								
Male	4	7	11	12	67	---		391
Female	2	2	9	16	72	---		387
<b>Age</b>								
18-35	2	4	10	15	69	---		308
36-60	2	4	12	12	70	---		289
61 +	6	5	7	14	69	---		166
<b>Income</b>								
Under \$30K	3	4	8	12	73	---		273
\$30K-\$60K	2	4	11	15	67	---		293
Over \$60K	5	5	14	12	64	---		149
Don't Know /Refused	1	4	5	16	74	---		65
<b>Education</b>								
Some HS	3	4	15	15	63	---		44
HS Grad	4	3	7	6	80	---		109
Some College	2	2	8	15	72	---		213
College Grad(4Yr)	3	5	12	15	66	---		403
<b>Place of Residents</b>								
Big City	2	4	12	14	69	---		259
Suburbs	4	6	9	15	67	---		248
Small City/Town	3	3	9	13	73	---		220
Farm/Country Home	3	7	13	12	65	---		46
<b>Occupation</b>								
Self Employed Small Business	1	2	17	11	69	---		70
White Collar Professional/managerial	4	4	13	13	67	---		240
Sales/Service Operational	1	6	7	9	78	---		129
Other	5	5	6	23	62	---		24
Don't Know /Refused	---	---	9	42	49	---		8
<b>Own/Rent Home</b>								
Rent	2	3	10	16	70	---		210
Own	3	6	10	14	67	---		527
Neither	---	---	9	---	91	---		32
Don't Know /Refused	---	---	---	---	100	---		11
<b>Children Living at Home</b>								
Kids at home	3	3	12	13	68	---		283
No Kids at Home	3	5	9	14	70	---		497

Table 6. Conditions Of Fish, Game And Wildlife

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	5%	4%	21%	21%	45%	4%	100%	N=799
<b>Gender</b>								
Male	6	6	21	22	45	---		390
Female	5	3	23	21	49	---		380
<b>Age</b>								
18-35	6	4	20	22	48	---		305
36-60	5	2	23	23	48	---		289
61 +	6	7	23	21	44	---		159
<b>Income</b>								
Under \$30K	5	2	19	24	50	---		264
\$30K-\$60K	8	6	20	21	45	---		294
Over \$60K	3	6	28	19	45	---		151
Don't Know /Refused	3	4	25	20	48	---		63
<b>Education</b>								
Some HS	15	---	12	19	54	---		42
HS Grad	10	5	22	20	43	---		107
Some College	5	2	21	22	51	---		209
College Grad(4Yr)	4	5	23	23	46	---		401
<b>Place of Residents</b>								
Big City	5	3	24	26	42	---		255
Suburbs	5	6	20	17	53	---		247
Small City/Town	7	3	21	23	47	---		215
Farm/Country Home	7	12	24	17	40	---		47
<b>Occupation</b>								
Self Employed Small Business	6	5	22	24	43	---		70
White Collar Professional/managerial	4	5	22	25	45	---		239
Sales/Service Operational	4	2	25	17	53	---		126
Other	10	---	11	25	55	---		24
Don't Know /Refused	---	---	33	18	49	---		8
<b>Own/Rent Home</b>								
Rent	7	3	20	23	48	---		206
Own	5	5	23	22	46	---		522
Neither	12	---	7	19	62	---		32
Don't Know /Refused	---	---	54	13	34	---		12
<b>Children Living at Home</b>								
Kids at home	7	4	21	21	48	---		279
No Kids at Home	4	5	23	22	46	---		492

Table 7. Population Growth In The States

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	8%	8%	30%	17%	37%	---	100%	N=799
<b>Gender</b>								
Male	10	10	33	14	33	---		396
Female	6	7	27	20	41	---		398
<b>Age</b>								
18-35	9	10	33	20	27	---		306
36-60	7	8	27	17	42	---		295
61 +	6	5	28	14	47	---		174
<b>Income</b>								
Under \$30K	11	7	26	19	37	---		276
\$30K-\$60K	6	10	32	17	36	---		298
Over \$60K	7	8	32	15	38	---		155
Don't Know /Refused	8	9	29	13	42	---		67
<b>Education</b>								
Some HS	9	8	23	21	39	---		46
HS Grad	12	2	24	19	44	---		111
Some College	6	11	28	15	39	---		216
College Grad(4Yr)	8	8	32	17	34	---		411
<b>Place of Residents</b>								
Big City	5	8	32	18	38	---		266
Suburbs	7	11	27	20	35	---		254
Small City/Town	13	6	32	16	33	---		220
Farm/Country Home	8	7	25	4	57	---		48
<b>Occupation</b>								
Self Employed Small Business	10	9	26	12	43	---		70
White Collar Professional/managerial	7	11	32	18	32	---		242
Sales/Service Operational	7	2	34	16	41	---		132
Other	19	5	27	20	30	---		24
Don't Know /Refused	9	19	40	9	23	---		8
<b>Own/Rent Home</b>								
Rent	11	11	28	18	33	---		212
Own	6	8	31	16	39	---		539
Neither	19	---	16	27	38	---		33
Don't Know /Refused	---	5	45	19	31	---		12
<b>Children Living at Home</b>								
Kids at home	5	8	30	18	40	---		286
No Kids at Home	10	9	30	17	35	---		510

Table 8. Bacteria And Organisms In Your Food

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	7%	8%	15%	13%	55%	2%	100%	N=799
<b>Gender</b>								
Male	9	11	16	12	53	---		392
Female	6	5	15	14	60	---		393
<b>Age</b>								
18-35	4	7	12	16	61	---		306
36-60	9	9	18	14	51	---		291
61 +	10	10	18	6	57	---		170
<b>Income</b>								
Under \$30K	8	9	13	10	60	---		271
\$30K-\$60K	5	7	19	15	55	---		297
Over \$60K	12	9	17	13	49	---		152
Don't Know /Refused	8	4	9	14	64	---		66
<b>Education</b>								
Some HS	13	6	7	10	64	---		45
HS Grad	3	4	17	6	70	---		109
Some College	5	10	14	11	60	---		213
College Grad(4Yr)	9	8	17	15	50	---		408
<b>Place of Residents</b>								
Big City	5	8	15	18	55	---		264
Suburbs	9	6	15	13	57	---		251
Small City/Town	7	9	16	9	59	---		219
Farm/Country Home	18	13	21	6	43	---		47
<b>Occupation</b>								
Self Employed Small Business	7	14	18	9	52	---		70
White Collar Professional/managerial	7	8	17	15	54	---		241
Sales/Service Operational	4	5	14	16	60	---		130
Other	15	3	13	16	53	---		24
Don't Know /Refused	---	---	19	32	49	---		8
<b>Own/Rent Home</b>								
Rent	6	9	12	15	59	---		212
Own	8	8	18	13	53	---		531
Neither	---	---	10	4	87	---		33
Don't Know /Refused	8	---	5	8	78	---		12
<b>Children Living at Home</b>								
Kids at home	7	6	11	14	62	---		285
No Kids at Home	7	9	18	12	53	---		502

Table 9. Availability Of Safe Drinking Water In The Future

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	3%	2%	8%	13%	74%	---	100%	N=799
<b>Gender</b>								
<b>Male</b>	4	3	10	15	68	---		398
<b>Female</b>	2	1	5	11	82	---		396
<b>Age</b>								
<b>18-35</b>	---	2	6	16	76	---		308
<b>36-60</b>	5	2	9	12	73	---		294
<b>61 +</b>	4	3	9	9	75	---		174
<b>Income</b>								
<b>Under \$30K</b>	2	2	6	13	77	---		276
<b>\$30K-\$60K</b>	2	2	6	15	75	---		298
<b>Over \$60K</b>	7	1	13	10	69	---		154
<b>Don't Know /Refused</b>	3	1	7	11	78	---		67
<b>Education</b>								
<b>Some HS</b>	4	1	2	8	85	---		46
<b>HS Grad</b>	2	2	3	13	80	---		111
<b>Some College</b>	2	1	7	16	74	---		216
<b>College Grad(4Yr)</b>	4	2	10	12	72	---		411
<b>Place of Residents</b>								
<b>Big City</b>	1	1	7	15	76	---		265
<b>Suburbs</b>	5	3	9	9	74	---		253
<b>Small City/Town</b>	2	1	7	15	75	---		223
<b>Farm/Country Home</b>	10	2	9	16	63	---		47
<b>Occupation</b>								
<b>Self Employed Small Business</b>	4	---	13	13	69	---		70
<b>White Collar Professional/managerial</b>	3	3	8	14	72	---		243
<b>Sales/Service Operational</b>	1	1	3	18	76	---		132
<b>Other</b>	---	5	5	10	81	---		24
<b>Don't Know /Refused</b>	---	---	---	28	72	---		8
<b>Own/Rent Home</b>								
<b>Rent</b>	1	1	6	16	76	---		212
<b>Own</b>	4	2	9	13	72	---		539
<b>Neither</b>	2	---	---	2	96	---		33
<b>Don't Know /Refused</b>	---	---	---	---	100	---		12
<b>Children Living at Home</b>								
<b>Kids at home</b>	3	3	7	14	74	---		288
<b>No Kids at Home</b>	3	1	8	13	75	---		508

Table 10. Disposal Of Garbage And Other Household Wastes

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	4%	4%	19%	22%	50%	1%	100%	N=799
<b>Gender</b>								
<b>Male</b>	5	6	24	22	43	---		395
<b>Female</b>	3	3	14	22	59	---		394
<b>Age</b>								
<b>18-35</b>	2	4	16	26	52	---		308
<b>36-60</b>	4	5	23	21	48	---		295
<b>61 +</b>	7	5	18	15	55	---		170
<b>Income</b>								
<b>Under \$30K</b>	4	3	17	17	58	---		274
<b>\$30K-\$60K</b>	4	3	21	27	45	---		298
<b>Over \$60K</b>	5	10	20	22	44	---		153
<b>Don't Know /Refused</b>	1	2	12	22	64	---		65
<b>Education</b>								
<b>Some HS</b>	7	3	14	14	62	---		45
<b>HS Grad</b>	5	3	20	19	53	---		111
<b>Some College</b>	3	3	15	23	56	---		217
<b>College Grad(4Yr)</b>	4	6	21	24	46	---		406
<b>Place of Residents</b>								
<b>Big City</b>	5	3	17	27	49	---		264
<b>Suburbs</b>	3	6	22	22	46	---		251
<b>Small City/Town</b>	3	4	17	21	55	---		222
<b>Farm/Country Home</b>	4	7	21	7	61	---		47
<b>Occupation</b>								
<b>Self Employed Small Business</b>	1	6	21	28	44	---		70
<b>White Collar Professional/managerial</b>	3	4	23	25	45	---		243
<b>Sales/Service Operational</b>	2	---	18	22	57	---		131
<b>Other</b>	---	---	25	31	45	---		24
<b>Don't Know /Refused</b>	---	---	32	52	17	---		8
<b>Own/Rent Home</b>								
<b>Rent</b>	3	3	17	23	54	---		211
<b>Own</b>	4	5	20	22	48	---		537
<b>Neither</b>	---	---	14	21	65	---		32
<b>Don't Know /Refused</b>	---	---	8	24	68	---		12
<b>Children Living at Home</b>								
<b>Kids at home</b>	3	3	19	23	52	---		288
<b>No Kids at Home</b>	4	5	19	22	50	---		504

Table 11. Tobacco Smoke Inside Buildings

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	17%	5%	18%	12%	47%	1%	100%	N=799
<b>Gender</b>								
Male	22	7	19	11	42	---		394
Female	13	3	18	13	53	---		396
<b>Age</b>								
18-35	18	5	17	14	46	---		304
36-60	20	4	21	13	41	---		293
61+	11	6	15	8	61	---		175
<b>Income</b>								
Under \$30K	21	5	15	11	48	---		273
\$30K-\$60K	17	4	17	12	51	---		297
Over \$60K	13	8	24	13	42	---		154
Don't Know /Refused	13	5	23	14	45	---		69
<b>Education</b>								
Some HS	23	5	18	16	38	---		45
HS Grad	20	7	14	5	54	---		111
Some College	13	5	21	15	46	---		215
College Grad(4Yr)	18	5	18	12	47	---		409
<b>Place of Residents</b>								
Big City	19	3	17	15	47	---		263
Suburbs	16	7	22	8	47	---		252
Small City/Town	18	5	15	14	49	---		222
Farm/Country Home	12	19	13	11	46	---		48
<b>Occupation</b>								
Self Employed Small Business	20	7	23	17	33	---		70
White Collar Professional/managerial	21	5	15	14	46	---		242
Sales/Service Operational	20	2	20	11	47	---		128
Other	14	---	14	21	52	---		24
Don't Know /Refused	18	---	13	19	49	---		8
<b>Own/Rent Home</b>								
Rent	17	6	15	16	47	---		211
Own	17	5	20	10	47	---		537
Neither	19	3	5	14	60	---		33
Don't Know /Refused	8	---	40	8	44	---		12
<b>Children Living at Home</b>								
Kids at home	18	4	15	14	49	---		285
No Kids at Home	17	6	20	11	47	---		507

Table 12. Radon in Buildings

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	13%	10%	22%	14%	31%	12%	102%	N=799
<b>Gender</b>								
Male	18	15	27	12	29	---		359
Female	11	7	22	19	41	---		342
<b>Age</b>								
18-35	10	10	25	19	37	---		281
36-60	16	13	26	15	30	---		265
61 +	22	8	22	11	38	---		140
<b>Income</b>								
Under \$30K	13	10	18	15	43	---		239
\$30K-\$60K	13	10	30	15	31	---		273
Over \$60K	21	15	25	16	24	---		136
Don't Know /Refused	10	7	23	14	46	---		54
<b>Education</b>								
Some HS	12	5	34	12	36	---		37
HS Grad	7	3	25	9	57	---		93
Some College	12	15	19	22	33	---		195
College Grad(4Yr)	18	12	27	14	30	---		366
<b>Place of Residents</b>								
Big City	11	7	30	17	35	---		236
Suburbs	16	15	21	15	33	---		227
Small City/Town	15	13	21	15	37	---		196
Farm/Country Home	19	6	30	16	29	---		37
<b>Occupation</b>								
Self Employed Small Business	22	18	29	5	26	---		61
White Collar Professional/managerial	15	13	25	18	29	---		223
Sales/Service Operational	6	11	33	12	39	---		124
Other	7	10	35	22	27	---		21
Don't Know /Refused	9	---	34	57	---	---		8
<b>Own/Rent Home</b>								
Rent	9	10	23	20	38	---		186
Own	17	12	26	14	31	---		475
Neither	3	9	17	5	67	---		30
Don't Know /Refused	8	5	28	12	47	---		12
<b>Children Living at Home</b>								
Kids at home	16	10	24	13	37	---		257
No Kids at Home	14	11	25	17	33	---		446

Table 13. Exposures to Chemicals or Pesticides While Working

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	12%	8%	19%	17%	43%	2%	101%	N=799
<b>Gender</b>								
Male	14	10	19	18	39	---		394
Female	9	6	19	16	50	---		388
<b>Age</b>								
18-35	9	7	22	22	41	---		305
36-60	12	10	16	15	46	---		292
61 +	17	6	20	13	45	---		167
<b>Income</b>								
Under \$30K	13	8	15	17	47	---		273
\$30K-\$60K	8	6	23	19	44	---		293
Over \$60K	19	10	20	16	35	---		153
Don't Know /Refused	9	6	19	13	53	---		64
<b>Education</b>								
Some HS	11	3	16	16	55	---		45
HS Grad	11	6	21	8	54	---		110
Some College	9	8	16	24	43	---		215
College Grad(4Yr)	14	9	21	15	40	---		400
<b>Place of Residents</b>								
Big City	9	6	20	20	46	---		260
Suburbs	13	8	21	17	41	---		251
Small City/Town	13	8	19	15	45	---		220
Farm/Country Home	20	12	16	13	40	---		45
<b>Occupation</b>								
Self Employed Small Business	15	12	33	13	28	---		70
White Collar Professional/managerial	13	9	18	17	43	---		242
Sales/Service Operational	6	7	21	19	47	---		131
Other	25	16	8	31	21	---		24
Don't Know /Refused	9	---	13	27	51	---		8
<b>Own/Rent Home</b>								
Rent	10	8	15	20	48	---		208
Own	13	8	22	16	41	---		531
Neither	9	---	10	24	58	---		33
Don't Know /Refused	---	8	5	---	87	---		12
<b>Children Living at Home</b>								
Kids at home	10	10	17	14	49	---		285
No Kids at Home	13	7	21	19	41	---		498

Table 14. Pollens and Other Things in the Air That Some People Are Allergic To

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	17%	10%	30%	15%	28%	---	100%	N=799
<b>Gender</b>								
Male	25	10	31	13	22	---		397
Female	9	10	30	17	35	---		397
<b>Age</b>								
18-35	19	10	30	18	23	---		308
36-60	16	12	32	14	27	---		293
61 +	13	7	29	11	39	---		175
<b>Income</b>								
Under \$30K	17	8	30	12	33	---		276
\$30K-\$60K	18	10	29	16	27	---		297
Over \$60K	18	15	33	15	19	---		154
Don't Know /Refused	8	7	29	20	37	---		69
<b>Education</b>								
Some HS	21	8	27	21	23	---		46
HS Grad	16	8	30	13	33	---		111
Some College	14	5	33	15	33	---		216
College Grad(4Yr)	18	14	29	15	25	---		411
<b>Place of Residents</b>								
Big City	14	9	29	18	29	---		266
Suburbs	15	12	32	14	28	---		252
Small City/Town	20	8	30	13	28	---		223
Farm/Country Home	25	15	25	11	24	---		48
<b>Occupation</b>								
Self Employed Small Business	18	24	29	18	11	---		70
White Collar Professional/managerial	18	10	29	18	25	---		243
Sales/Service Operational	20	11	35	12	22	---		130
Other	33	10	17	14	26	---		24
Don't Know /Refused	---	17	61	---	23	---		8
<b>Own/Rent Home</b>								
Rent	18	9	29	18	27	---		213
Own	16	11	31	13	29	---		539
Neither	25	5	15	15	40	---		33
Don't Know /Refused	17	---	38	28	17	---		12
<b>Children Living at Home</b>								
Kids at home	14	10	30	15	31	---		287
No Kids at Home	19	10	30	15	27	---		509

Table 15. The Quality Of Water You Drink

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	4%	3%	9%	15%	70%	---	101%	N=799
<b>Gender</b>								
Male	4	5	12	14	66	---		396
Female	4	1	7	15	74	---		398
<b>Age</b>								
18-35	---	1	9	17	73	---		305
36-60	5	4	10	14	67	---		294
61 +	6	5	9	12	69	---		175
<b>Income</b>								
Under \$30K	3	4	8	13	72	---		275
\$30K-\$60K	2	2	9	16	71	---		298
Over \$60K	7	4	13	14	62	---		154
Don't Know /Refused	6	3	8	13	71	---		69
<b>Education</b>								
Some HS	6	2	4	11	78	---		46
HS Grad	3	5	5	10	78	---		109
Some College	2	2	7	18	71	---		217
College Grad(4Yr)	4	3	12	14	66	---		412
<b>Place of Residents</b>								
Big City	3	2	9	15	72	---		267
Suburbs	4	4	9	15	69	---		253
Small City/Town	4	3	8	15	71	---		221
Farm/Country Home	10	2	19	11	58	---		47
<b>Occupation</b>								
Self Employed Small Business	4	2	7	22	66	---		70
White Collar Professional/managerial	4	3	11	15	68	---		243
Sales/Service Operational	1	4	9	17	70	---		132
Other	---	5	8	14	74	---		24
Don't Know /Refused	---	---	22	19	59	---		8
<b>Own/Rent Home</b>								
Rent	2	2	8	14	75	---		213
Own	5	4	10	16	66	---		541
Neither	---	---	2	3	95	---		30
Don't Know /Refused	---	---	---	8	92	---		12
<b>Children Living at Home</b>								
Kids at home	4	4	8	17	69	---		288
No Kids at Home	4	3	10	13	70	---		508

Table 16. Pesticides And Chemicals In Your Food

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	6%	4%	17%	17%	56%	1%	101%	N=799
<b>Gender</b>								
Male	8	6	19	17	51	---		392
Female	3	3	15	17	63	---		396
<b>Age</b>								
18-35	4	2	15	22	59	---		305
36-60	4	6	20	15	56	---		294
61 +	12	6	17	12	54	---		173
<b>Income</b>								
Under \$30K	5	4	17	12	62	---		272
\$30K-\$60K	4	4	14	21	57	---		297
Over \$60K	10	6	23	16	45	---		154
Don't Know /Refused	6	3	14	17	61	---		67
<b>Education</b>								
Some HS	7	4	10	12	68	---		45
HS Grad	5	2	11	15	68	---		108
Some College	4	4	19	13	61	---		216
College Grad(4Yr)	7	5	18	19	51	---		408
<b>Place of Residents</b>								
Big City	3	3	18	17	59	---		265
Suburbs	6	4	18	18	53	---		250
Small City/Town	6	5	13	16	59	---		222
Farm/Country Home	15	7	21	7	50	---		46
<b>Occupation</b>								
Self Employed Small Business	6	10	15	22	48	---		70
White Collar Professional/managerial	4	4	18	19	56	---		243
Sales/Service Operational	2	2	21	19	56	---		131
Other	5	5	6	16	69	---		24
Don't Know /Refused	---	---	8	42	51	---		8
<b>Own/Rent Home</b>								
Rent	3	2	18	16	60	---		209
Own	7	5	17	17	54	---		536
Neither	3	---	---	14	83	---		33
Don't Know /Refused	8	---	13	28	51	---		12
<b>Children Living at Home</b>								
Kids at home	4	4	14	15	62	---		288
No Kids at Home	7	4	18	18	53	---		502

Table 17. The Condition Of Forests, Deserts, And Other Natural Areas

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	3%	3%	18%	23%	53%	1%	101%	N=799
<b>Gender</b>								
Male	4	3	19	26	49	---		397
Female	2	3	17	21	57	---		395
<b>Age</b>								
18-35	2	2	16	26	54	---		308
36-60	3	3	17	25	53	---		295
61 +	5	3	22	17	53	---		171
<b>Income</b>								
Under \$30K	4	4	14	22	56	---		275
\$30K-\$60K	1	2	19	26	52	---		297
Over \$60K	5	2	23	23	47	---		153
Don't Know /Refused	4	6	15	19	55	---		69
<b>Education</b>								
Some HS	2	4	10	20	64	---		44
HS Grad	3	1	17	23	55	---		111
Some College	2	5	15	23	55	---		216
College Grad(4Yr)	3	3	19	25	51	---		411
<b>Place of Residents</b>								
Big City	3	2	18	24	53	---		266
Suburbs	3	3	17	23	55	---		253
Small City/Town	3	4	16	25	53	---		221
Farm/Country Home	4	2	29	17	48	---		47
<b>Occupation</b>								
Self Employed Small Business	2	7	15	29	47	---		70
White Collar Professional/managerial	1	2	19	24	53	---		242
Sales/Service Operational	2	1	14	23	60	---		132
Other	---	3	11	32	54	---		24
Don't Know /Refused	---	---	13	42	45	---		8
<b>Own/Rent Home</b>								
Rent	3	4	13	27	54	---		212
Own	3	3	21	22	52	---		537
Neither	3	2	3	33	59	---		33
Don't Know /Refused	---	---	25	16	59	---		12
<b>Children Living at Home</b>								
Kids at home	2	3	18	26	51	---		287
No Kids at Home	4	3	18	22	54	---		507

Table 18. Natural Hazards Like Floods, Earthquakes And Forest Fires And Other Accidents

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	17%	14%	31%	15%	23%	1%	101%	N=799
<b>Gender</b>								
Male	22	15	29	13	21	---		395
Female	13	12	33	18	25	---		397
<b>Age</b>								
18-35	14	14	32	18	23	---		304
36-60	21	15	31	14	20	---		293
61 +	17	11	31	13	28	---		176
<b>Income</b>								
Under \$30K	18	10	26	16	29	---		274
\$30K-\$60K	15	14	35	17	20	---		298
Over \$60K	23	20	34	10	13	---		155
Don't Know /Refused	11	11	32	15	31	---		68
<b>Education</b>								
Some HS	21	6	22	14	36	---		45
HS Grad	15	7	29	11	38	---		108
Some College	15	13	33	18	21	---		216
College Grad(4Yr)	19	16	32	15	18	---		413
<b>Place of Residents</b>								
Big City	18	14	29	16	22	---		266
Suburbs	17	15	37	12	19	---		251
Small City/Town	17	11	30	16	27	---		223
Farm/Country Home	16	16	21	17	30	---		48
<b>Occupation</b>								
Self Employed Small Business	24	19	32	10	15	---		70
White Collar Professional/managerial	21	17	31	14	17	---		242
Sales/Service Operational	12	12	34	15	27	---		131
Other	18	10	29	29	14	---		24
Don't Know /Refused	9	23	28	33	8	---		8
<b>Own/Rent Home</b>								
Rent	17	14	28	16	26	---		208
Own	18	14	33	15	20	---		542
Neither	16	2	16	27	39	---		33
Don't Know /Refused	8	17	42	---	33	---		12
<b>Children Living at Home</b>								
Kids at home	19	10	29	19	24	---		286
No Kids at Home	16	16	33	13	22	---		508

Table 19. Exposure To Poisons From Spills

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	10%	11%	24%	18%	37%	1%	101%	N=799
<b>Gender</b>								
Male	12	12	25	17	34	---		397
Female	7	10	23	20	40	---		394
<b>Age</b>								
18-35	8	8	21	25	38	---		306
36-60	10	13	26	15	36	---		295
61 +	13	12	26	12	37	---		172
<b>Income</b>								
Under \$30K	13	9	18	20	42	---		275
\$30K-\$60K	7	11	27	20	36	---		296
Over \$60K	14	15	31	16	24	---		155
Don't Know /Refused	4	10	22	15	49	---		67
<b>Education</b>								
Some HS	12	6	13	30	39	---		45
HS Grad	9	6	23	17	46	---		110
Some College	7	12	22	20	40	---		214
College Grad(4Yr)	12	12	27	18	33	---		412
<b>Place of Residents</b>								
Big City	10	9	25	22	35	---		265
Suburbs	10	14	27	15	33	---		252
Small City/Town	10	7	21	19	43	---		222
Farm/Country Home	10	23	14	16	38	---		47
<b>Occupation</b>								
Self Employed Small Business	13	11	18	29	29	---		70
White Collar Professional/managerial	10	13	26	17	35	---		243
Sales/Service Operational	5	8	23	20	44	---		132
Other	14	6	31	28	21	---		24
Don't Know /Refused	9	23	---	46	22	---		8
<b>Own/Rent Home</b>								
Rent	8	9	21	25	38	---		211
Own	11	12	27	16	35	---		538
Neither	11	---	9	25	55	---		33
Don't Know /Refused	---	8	22	---	70	---		12
<b>Children Living at Home</b>								
Kids at home	8	9	22	20	41	---		286
No Kids at Home	11	12	25	18	34	---		507

Table 20. Condition Of Important Historic Places Such As Historic Buildings Or Ancient Ruins

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	4%	8%	26%	22%	38%	1%	99%	N=799
<b>Gender</b>								
Male	5	10	26	22	38	---		397
Female	4	7	26	23	39	---		394
<b>Age</b>								
18-35	3	10	26	24	37	---		305
36-60	6	7	27	22	40	---		294
61 +	5	6	26	22	41	---		174
<b>Income</b>								
Under \$30K	5	8	23	18	46	---		273
\$30K-\$60K	3	8	25	27	37	---		298
Over \$60K	7	10	36	21	26	---		155
Don't Know /Refused	2	8	23	25	41	---		68
<b>Education</b>								
Some HS	3	12	35	16	35	--		43
HS Grad	9	8	17	14	53	---		109
Some College	2	7	28	24	39	---		216
College Grad(4Yr)	5	9	26	25	36	---		413
<b>Place of Residents</b>								
Big City	4	7	24	22	43	---		266
Suburbs	5	9	28	27	31	---		253
Small City/Town	5	7	27	18	44	---		220
Farm/Country Home	---	19	26	21	34	---		48
<b>Occupation</b>								
Self Employed Small Business	3	10	29	31	28	---		70
White Collar Professional/managerial	4	8	28	24	37	---		243
Sales/Service Operational	1	7	29	20	43	---		131
Other	---	11	21	21	47	---		24
Don't Know /Refused	---	13	33	17	38	---		8
<b>Own/Rent Home</b>								
Rent	5	12	29	20	34	---		210
Own	4	8	26	24	39	---		541
Neither	8	---	16	22	54	---		31
Don't Know /Refused	8	8	25	13	46	---		12
<b>Children Living at Home</b>								
Kids at home	5	9	22	25	39	---		285
No Kids at Home	4	8	28	21	38	---		509

Table 21. Ultraviolet Radiation From The Sun

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	13%	9%	24%	20%	32%	2%	100%	N=799
<b>Gender</b>								
Male	18	11	24	20	27	---		394
Female	9	8	25	21	38	---		392
<b>Age</b>								
18-35	12	8	26	24	31	---		302
36-60	16	10	26	19	29	---		294
61 +	12	9	21	16	42	---		170
<b>Income</b>								
Under \$30K	12	7	27	19	36	---		270
\$30K-\$60K	14	9	23	24	30	---		296
Over \$60K	19	16	27	14	25	---		153
Don't Know /Refused	7	9	18	21	46	---		68
<b>Education</b>								
Some HS	15	3	25	24	34	---		43
HS Grad	8	5	26	20	41	---		108
Some College	12	9	29	20	31	---		215
College Grad(4Yr)	16	10	22	21	31	---		408
<b>Place of Residents</b>								
Big City	13	9	23	21	35	---		265
Suburbs	12	12	28	23	26	---		250
Small City/Town	16	7	22	18	37	---		217
Farm/Country Home	15	11	30	10	35	---		47
<b>Occupation</b>								
Self Employed Small Business	16	18	22	16	28	---		69
White Collar Professional/managerial	19	9	26	23	23	---		242
Sales/Service Operational	10	8	27	21	34	---		129
Other	5	10	21	13	51	---		24
Don't Know /Refused	9	21	42	9	19	---		8
<b>Own/Rent Home</b>								
Rent	13	10	23	21	33	---		210
Own	14	10	25	19	32	---		532
Neither	3	---	24	39	33	---		33
Don't Know /Refused	13	8	18	12	49	---		12
<b>Children Living at Home</b>								
Kids at home	17	10	22	20	33	---		284
No Kids at Home	12	9	26	20	32	---		502

Table 22. Global Warming

	No Concern	Not Too Concerned	Moderately Concerned	Somewhat Concerned	Great Concern	Don't Know	Total	(N)
<b>Total</b>	19%	9%	25%	18%	26%	4%	101%	N=799
<b>Gender</b>								
Male	26	11	25	15	22	---		389
Female	12	7	28	22	31	---		378
<b>Age</b>								
18-35	17	5	28	20	29	---		303
36-60	22	11	26	18	24	---		288
61 +	20	9	25	16	29	---		161
<b>Income</b>								
Under \$30K	16	8	22	20	34	---		264
\$30K-\$60K	21	10	31	17	22	---		293
Over \$60K	28	8	25	20	18	---		149
Don't Know /Refused	7	10	28	15	41	---		62
<b>Education</b>								
Some HS	23	5	33	12	27	---		43
HS Grad	11	8	25	15	40	---		105
Some College	16	10	28	22	24	---		210
College Grad(4Yr)	23	9	25	18	25	---		399
<b>Place of Residents</b>								
Big City	17	7	26	21	29	---		260
Suburbs	21	8	30	19	22	---		245
Small City/Town	20	13	23	16	29	---		215
Farm/Country Home	21	5	28	18	29	---		42
<b>Occupation</b>								
Self Employed Small Business	20	13	25	21	21	---		68
White Collar Professional/managerial	20	8	31	20	21	---		238
Sales/Service Operational	14	11	24	19	33	---		127
Other	18	11	24	22	25	---		24
Don't Know /Refused	9	30	33	28	---	---		8
<b>Own/Rent Home</b>								
Rent	16	7	25	23	30	---		205
Own	22	10	27	16	25	---		521
Neither	10	---	18	31	40	---		32
Don't Know /Refused	---	5	28	39	28	---		11
<b>Children Living at Home</b>								
Kids at home	19	8	29	17	27	---		283
No Kids at Home	20	10	25	19	27	---		485

## RESPONSIBILITIES

1. To provide a safe and healthy working environment for all employees.  
2. To ensure that all employees are properly trained and supervised.  
3. To ensure that all equipment and machinery is properly maintained and used safely.  
4. To ensure that all safety procedures and protocols are followed.  
5. To ensure that all safety hazards are identified and corrected promptly.

The third component of this survey investigated public perceptions of who is responsible for the costs of environmental protection, and who should bear the costs of enforcing environmental regulations, and whether individuals were willing to accept some of these costs themselves. Because environmental regulations are established and enforced by units of government, the survey began by asking Respondent to register their perceptions of the job the government is doing in this area.

Early focus groups revealed significant disagreement regarding how large a role government should play in environmental protection, particularly where environmental regulations might be seen as limiting economic growth. Some focus group participants felt strongly that environmental protection must take precedent over economic growth. Others felt equally strongly that the government had already gone too far in limiting economic development in favor of environmental protection. In order to evaluate these sentiments on a statewide basis respondents were asked to indicate which of three statements best represents their personal feelings about environmental protection:

The government overemphasizes environmental regulation at the expense of economic growth in Arizona;

The government overemphasizes economic growth at the expense of the environment in Arizona; or,

The government provides a good balance between environmental regulation and economic growth in Arizona.

Almost half of all respondents (48%) responded that they felt economic growth is overemphasized at the expense of the environment (See Figure 1 and Table 1). This figure stands in contrast to the 15 percent of respondents who believe environmental protection is overemphasized. A quarter of respondents (28%) believe the government strikes a good balance between the economic growth and environmental protection. The most notable difference in responses were shaped by the respondent's occupation. Small business owners and the self-employed were more likely to say the environmental regulation was overemphasized, and less likely to say that economic growth was overemphasized than other groups. While 26% of the small-business owners and self-employed workers in the sample indicated that environmental protection was overemphasized in Arizona, only 14% of managerial, white collar, blue collar and sales and service workers agreed with that statement. Similarly, while 37% of the self-employed and small business respondents said environmental protection was overemphasized, over 50% of the other respondents agreed with this statement.

While governmental agencies create and enforce environmental regulations, industry is frequently the target of those regulations. To assess the public perception of industry responsibility for environmental protection respondents were asked if industry should pay for environmental harms they cause. An overwhelming 78 percent said they strongly agree that industry should pay for the costs of environmental harms for which they are responsible (See

Figure 2 and Table 2). Another 15 percent of respondents somewhat agree. Thus, overall, 93% of those surveyed agreed with the proposition that industry should bear the financial burdens of its impact on the environment.

If industry bears more of the costs of environmental regulation, however, many of these costs will inevitably be passed on to consumers in the form of higher costs for goods and services. In order to measure how Arizonans would respond to these increases we asked respondents if they would be willing to pay these higher costs resulting from environmental regulation. Two thirds of respondents (67%) said they would be willing to pay these costs (See Figure 3 and Table 3). Fourteen percent (14%) said they would not be willing to pay higher costs for environmental protection, and 17 percent said their willingness to pay these higher costs depends upon the nature of the item to be purchased and the new price levels.

Just as increases in costs to industry for environmental protection can lead to higher costs for goods and services, more governmental regulation may lead to higher taxes. When asked if they would be willing to pay higher taxes for environmental protection, just over half of all respondents (52%) indicated they would be willing to do so (See Figure 4 and Table 4). Half as many respondents (28%) said they would be unwilling to pay higher taxes for environmental protection. In probing the attitudes of people supportive of paying higher taxes (N=487), respondents were asked to indicate how much more they'd be willing to pay. The most frequent response was between \$100 and \$199 (31%) (See Figure 5 and Table 5). A quarter of respondents (27%) are willing to pay between \$200 and \$499 for environmental protection and 15 percent are willing to pay \$500 or more for environmental protection.

Finally, the survey sought to further identify public policy priorities regarding the allocation of tax dollars by asking respondents to assume the role of a legislator and to decide how to spend available tax dollars. The first question asked respondents to distribute \$100 across five policy areas: Building new prisons, putting more police on the street, spending on the poor and elderly, protecting the environment, and providing health care. When all the options are put together, health care received the highest level of financial support with respondents allocating an average of \$23.59 to this category (See Figure 6). Environmental protection was the second most supported category with an average allocation of \$23.29. Money for the poor and elderly comes in third with just over \$20 being allocated. Police protection received \$19.48, and expanding prisons received the lowest level of support with only an average of \$11.46 being allocated to that category.

The survey then asked respondents to allocate \$100 across five *environmental* policy areas to assess the relative public policy priorities for environmental protection. These were: protecting air quality, protecting water quality, safe disposal of hazardous wastes, preserving natural areas, and protecting plant and animal species. Respondents were most willing to spend money on protecting water quality (\$23.60) [See Figure 7]. This finding is consistent with the high level of public concern for the availability and quality of safe drinking water found in early segments of the survey. Protecting air quality came in second with an average of \$21 being allocated to it. Disposal of hazardous wastes received an average of \$19.47,

protecting plants and animal species was allocated \$17.69, and preserving natural areas was a distant fifth with an allocation of \$11.46.

Overall, Arizonans feels strongly that industry and government should both be involved in protecting the environment. The vast majority feel that industry should pay for the environmental harms it generates, and that the Arizona government currently overemphasizes economic growth to the detriment of environmental protection. When it comes to costs, the public is most willing to pay for the increased costs of goods and services that may be passed on to consumers by industry. A significant portion of the public is also willing to pay higher government taxes, and their support runs well into significant dollar outlays over the course of one year.

## ATTITUDES TOWARD GOVERNMENTAL REGULATION

Figure 1.

Which of the following statements best describes your feelings about environmental regulation in Arizona: One, The government overemphasizes environmental regulation at the expense of economic growth. Two, the government overemphasizes economic growth at the expense of the environment in Arizona. Or, Three, the government provides a good balance between environmental regulation and economic growth in Arizona?

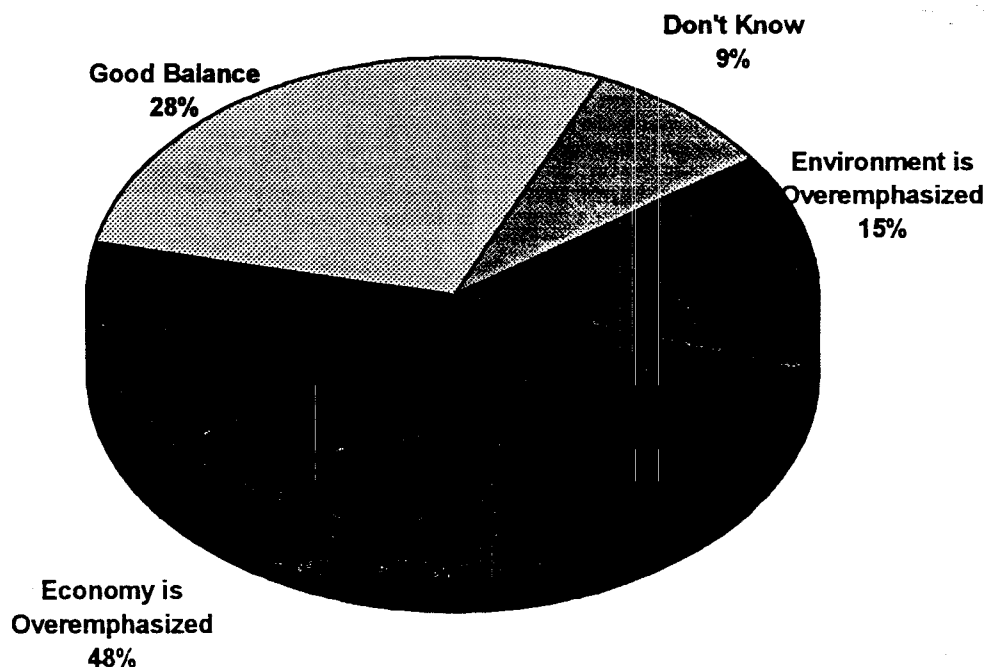


Figure 1. (N=796) Shows that 15% of the respondents believe environmental protection is overemphasized. Almost half of the respondents (48%) believe that economic growth is overemphasized. A little over one quarter believe the government has struck a good balance between economic growth and environmental protection. Nine percent of the respondents answered that they don't know.

**Table 1.** Which of the following statements best describes your feelings about environmental regulation in Arizona: One, The government overemphasizes environmental regulation at the expense of economic growth. Two, the government overemphasizes economic growth at the expense of the environment in Arizona. Or, Three, the government provides a good balance between environmental regulation and economic growth in Arizona?

	Environmental protection is overemphasized	Economic growth is overemphasized	Good balance	Don't know	Refused	Total	(N)
<b>Total</b>	15%	48%	28%	9%	1%	101%	N=799
<b>Gender</b>							
Male	18	44	32	6	---		397
Female	12	52	24	12	---		396
<b>Age</b>							
18-35	12	51	30	8	---		308
36-60	18	49	25	8	---		294
61 +	15	43	32	11	---		174
<b>Income</b>							
Under \$30K	12	51	27	11	---		276
\$30K-\$60K	17	47	29	6	---		297
Over \$60K	17	43	30	10	---		154
Don't Know/Refused	14	54	24	8	---		68
<b>Education</b>							
Some HS	17	49	22	12	---		46
HS Grad	15	53	28	5	---		110
Some College	18	56	20	6	---		215
College Grad(4Yr)	13	43	33	11	---		413
<b>Place of Residents</b>							
Big City	12	51	29	8	---		266
Suburbs	9	49	33	9	---		254
Small City/Town	23	46	23	9	---		221
Farm/Country Home	28	40	26	7	---		48
<b>Occupation</b>							
Self Employed Small Business	26	37	32	5	---		70
White Collar Professional/managerial	14	50	28	8	---		243
Sales/Service Operational	14	54	25	7	---		132
Other	18	34	36	12	---		24
Don't Know/Refused	9	69	22	---	---		8
<b>Own/Rent Home</b>							
Rent	11	55	25	9	---		212
Own	17	46	29	9	---		540
Neither	12	44	35	9	---		33
Don't Know/Refused	---	56	35	9	---		11
<b>Children Living at Home</b>							
Kids at home	17	50	26	8	---		288
No Kids at Home	14	47	29	9	---		508

## INDUSTRY SHOULD PAY FOR THEIR ENVIRONMENTAL HARMS

Figure 2.

Industry Should Pay For The Environmental Harms They Cause.

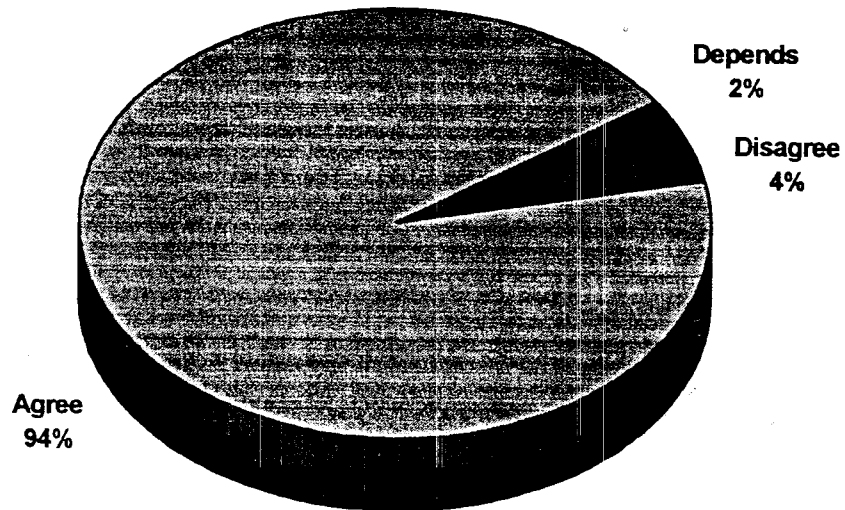


Figure 2. Shows that over 9 out of 10 respondents (94%) feel that industry should pay for the environmental harms they cause. Only four percent disagreed with the statement, and two percent said it depends.

Table 2. Industry Should Pay For The Environmental Harm They Cause.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure/depends	Total	(N)
<b>Total</b>	78%	15%	3%	1%	2%	99%	N=797
<b>Gender</b>							
<b>Male</b>	74	19	4	1	2		396
<b>Female</b>	83	12	3	1	2		399
<b>Age</b>							
<b>18-35</b>	79	16	5	1	---		308
<b>36-60</b>	79	14	2	1	3		293
<b>61 +</b>	75	16	3	3	3		176
<b>Income</b>							
<b>Under \$30K</b>	79	15	4	1	1		277
<b>\$30K-\$60K</b>	80	14	2	2	3		297
<b>Over \$60K</b>	75	19	5	---	2		153
<b>Don't Know/Refused</b>	79	16	1	2	2		69
<b>Education</b>							
<b>Some HS</b>	72	18	2	6	3		46
<b>HS Grad</b>	79	14	5	1	2		111
<b>Some College</b>	78	15	4	1	2		217
<b>College Grad(4Yr)</b>	79	16	3	1	2		411
<b>Place of Residents</b>							
<b>Big City</b>	83	12	2	2	2		264
<b>Suburbs</b>	78	16	3	1	2		254
<b>Small City/Town</b>	76	18	4	1	1		223
<b>Farm/Country Home</b>	71	15	7	2	5		48
<b>Occupation</b>							
<b>Self Employed Small Business</b>	75	16	4	---	6		70
<b>White Collar Professional/managerial</b>	79	15	3	1	2		242
<b>Sales/Service Operational</b>	85	12	2	---	1		131
<b>Other</b>	93	8	---	---	---		24
<b>Don't Know/Refused</b>	62	39	---	---	---		8
<b>Own/Rent Home</b>							
<b>Rent</b>	84	12	3	1	1		213
<b>Own</b>	77	15	4	2	3		540
<b>Neither</b>	62	36	---	---	2		33
<b>Don't Know/Refused</b>	76	25	---	---	---		12
<b>Children Living at Home</b>							
<b>Kids at home</b>	83	11	3	1	2		286
<b>No Kids at Home</b>	76	18	3	1	2		511

## WILLINGNESS TO PAY FOR ENVIRONMENTAL REGULATION: HIGHER COSTS

**Figure 3.**

Now, Increased protection of the environment could lead to higher costs for goods and services. Would you be willing to pay these higher costs to protect the environment?

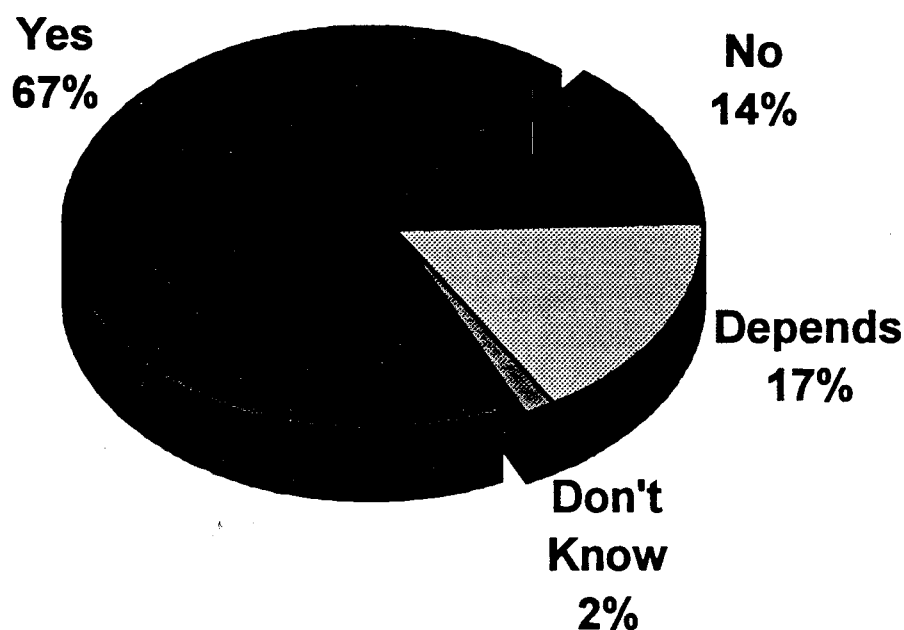


Figure 3. shows that 67% of the respondents are willing to pay higher costs for goods and services to protect the environment. While 14% of the respondents say they are not willing to pay higher costs for goods and services to protect the environment. Seventeen percent said it depends. Only two percent said they don't know.

**Table 3. Now, increased protection of the environment could lead to higher costs for goods and services.  
Would you be willing to pay these higher costs to protect the environment?**

	Yes	No	Depends	Don't know/refused	Total	(N)
<b>Total</b>	67%	14%	17%	2%	100%	N=799
<b>Gender</b>						
Male	64	17	18	2		398
Female	71	11	17	2		399
<b>Age</b>						
18-35	69	15	15	1		308
36-60	68	12	18	2		295
61 +	64	16	19	1		176
<b>Income</b>						
Under \$30K	68	15	16	2		277
\$30K-\$60K	68	11	19	1		298
Over \$60K	71	13	14	2		155
Don't Know/Refused	55	22	20	4		69
<b>Education</b>						
Some HS	67	19	10	3		46
HS Grad	59	20	17	4		111
Some College	69	13	17	1		217
College Grad(4Yr)	70	12	17	1		413
<b>Place of Residents</b>						
Big City	73	10	17	1		267
Suburbs	68	12	19	2		254
Small City/Town	64	20	15	2		223
Farm/Country Home	58	20	20	2		48
<b>Occupation</b>						
Self Employed Small Business	69	20	11	---		70
White Collar Professional/managerial	70	13	16	2		243
Sales/Service Operational	68	10	21	1		132
Other	70	15	16	---		24
Don't Know/Refused	38	42	13	8		8
<b>Own/Rent Home</b>						
Rent	71	14	14	1		213
Own	66	14	18	2		542
Neither	75	17	8	---		33
Don't Know/Refused	39	12	41	8		12
<b>Children Living at Home</b>						
Kids at home	66	13	19	2		288
No Kids at Home	68	14	16	2		512

## WILLINGNESS TO PAY FOR ENVIRONMENTAL REGULATION: TAXES

Figure 4.

Increased protection of the environment could lead to higher taxes. Would you be willing to pay higher taxes so that the government could better protect the environment?

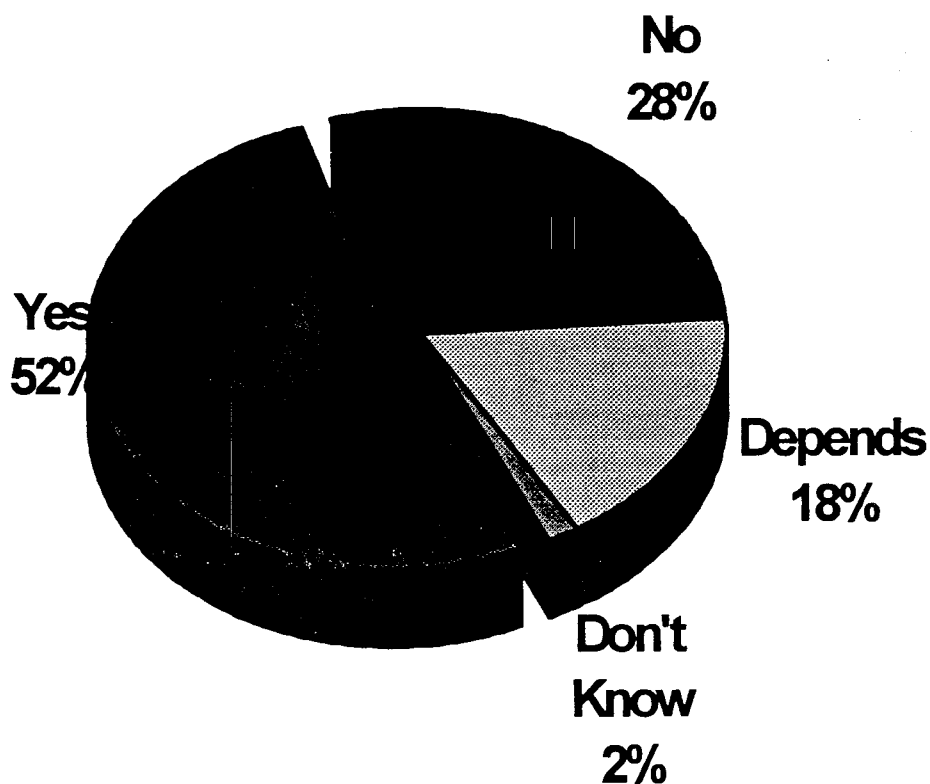


Figure 4. Shows that over half of the respondents (52%) are willing to pay higher taxes so the government could better protect the environment. Over one quarter of the respondents (28%) say they are not willing to pay higher taxes so the government could better protect the environment. Eighteen percent said it depends. Only two percent said they don't know.

**Table 4. Increased protection of the environment could lead to higher taxes. Would you be willing to pay higher taxes so that government could better protect the environment?**

	Yes	No	Depends	Don't know/refused	Total	(N)
<b>Total</b>	52%	28%	18%	2%	100%	N=799
<b>Gender</b>						
Male	49	34	16	1		398
Female	56	22	19	2		399
<b>Age</b>						
18-35	59	27	12	2		308
36-60	49	28	22	1		295
61 +	50	29	20	1		176
<b>Income</b>						
Under \$30K	57	27	16	1		277
\$30K-\$60K	52	27	20	2		298
Over \$60K	50	31	18	2		155
Don't Know/Refused	41	38	15	5		69
<b>Education</b>						
Some HS	65	25	10	—		46
HS Grad	49	31	17	4		111
Some College	54	24	20	3		217
College Grad(4Yr)	52	30	18	1		413
<b>Place of Residents</b>						
Big City	58	24	17	1		267
Suburbs	53	29	16	2		254
Small City/Town	50	33	15	2		223
Farm/Country Home	31	36	33	—		48
<b>Occupation</b>						
Self Employed Small Business	44	39	17	—		70
White Collar Professional/managerial	53	30	15	2		243
Sales/Service Operational	60	19	21	1		132
Other	51	27	13	10		24
Don't Know/Refused	19	55	26	—		8
<b>Own/Rent Home</b>						
Rent	57	29	14	—		213
Own	50	29	20	2		542
Neither	65	22	2	12		33
Don't Know/Refused	58	13	21	8		12
<b>Children Living at Home</b>						
Kids at home	53	25	20	2		288
No Kids at Home	52	30	16	2		512

## AMOUNT WILLING TO PAY IN MORE TAXES

**Figure 5.**

I am interested in knowing how much money you are willing to pay each year in higher taxes for more environmental protection? I am going to read a list of dollar amounts from larger to smaller. Please stop me when I get to a range that includes the amount of higher taxes you are willing to spend each year for environmental protection.

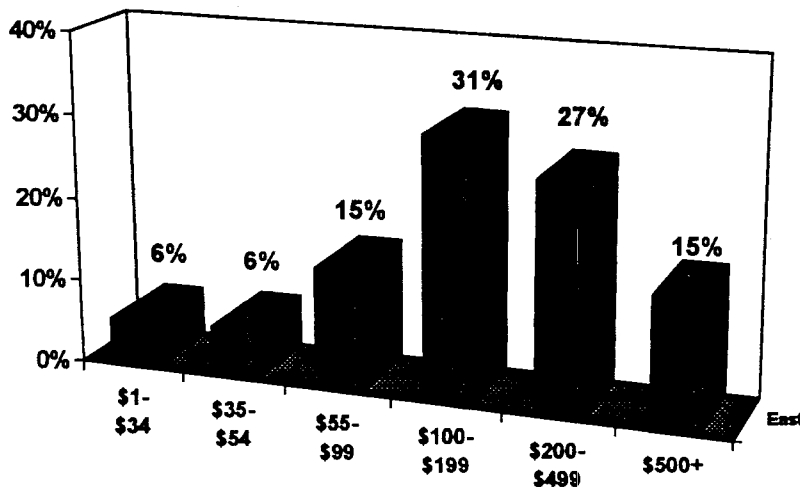


Figure 5. (n=487) Shows what amounts respondents are willing to pay in higher taxes to protect the environment. Six percent say they are willing to pay \$1 to \$34 more in taxes to protect the environment. Another six percent of the respondents are willing to pay \$35 to \$54 dollars more in taxes to protect the environment. 15% are willing to pay \$55 to \$99 dollars more in taxes to protect the environment. Almost one third of the respondents (31%) are willing to pay \$100 to \$199 more in taxes to protect the environment. Finally there are over one quarter of the respondents (27%) that are willing to pay \$200 to \$499 more in taxes to protect the environment, and there are 15% of the respondents that are willing to pay \$500 or more in taxes to protect the environment.

**Table 5.** I am interested in knowing how much money you are willing to pay each year in amounts. Please stop me when I get to a range that includes the amount of higher taxes you are willing to spend each year for environmental protection.

	\$500 or more	\$200 to \$499	\$100 to \$199	\$55 to \$99	\$35 to \$54	\$1 to \$34	SubTotal	(N)
<b>Total</b>	13%	24%	27%	13%	5%	5%	87%	N=558
<b>Gender</b>								
Male	18	26	26	17	6	7		225
Female	14	28	35	13	6	4		262
<b>Age</b>								
18-35	13	29	32	16	5	6		206
36-60	18	29	29	13	7	4		183
61 +	17	20	34	16	5	8		92
<b>Income</b>								
Under \$30K	12	25	26	17	10	11		181
\$30K-\$60K	14	31	36	14	4	2		182
Over \$60K	24	28	32	8	2	5		96
Don't Know/Refused	19	14	30	23	8	5		29
<b>Education</b>								
Some HS	4	24	19	15	29	10		32
HS Grad	10	24	33	16	3	14		59
Some College	13	23	33	21	6	4		141
College Grad(4Yr)	20	30	31	10	4	4		252
<b>Place of Residents</b>								
Big City	13	21	36	13	8	9		172
Suburbs	19	30	26	16	5	4		155
Small City/Town	15	30	32	15	5	2		131
Farm/Country Home	13	34	27	9	8	9		26
<b>Occupation</b>								
Self Employed Small Business	23	15	33	19	10	---		37
White Collar Professional/managerial	13	30	36	14	4	3		150
Sales/Service Operational	12	30	24	13	10	12		95
Other	17	10	51	22	---	---		15
Don't Know/Refused	---	79	---	21	---	---		3
<b>Own/Rent Home</b>								
Rent	12	25	30	14	10	9		138
Own	17	27	33	15	5	4		323
Neither	15	50	23	7	6	---		20
Don't Know/Refused	---	15	14	50	---	22		7
<b>Children Living at Home</b>								
Kids at home	12	26	34	15	8	4		190
No Kids at Home	18	28	29	14	5	7		297

## \$100 ALLOCATED ACROSS FIVE POLICY AREAS

**Figure 6.**

Assume you are a legislator and you have \$100 to spend on government programs. Your \$100 can be divided across one or more of the following five policy areas: environmental protection, health care, aid for the poor and elderly, prison construction, and police protection. How would you divide your \$100 across these areas?

- How much of this money would you spend on environmental protection?
- How much of this money would you spend on health care?
- How much of this money would you spend on aid for the poor and elderly?
- How much of this money would you spend on prison construction?
- How much of this money would you spend on police protection?

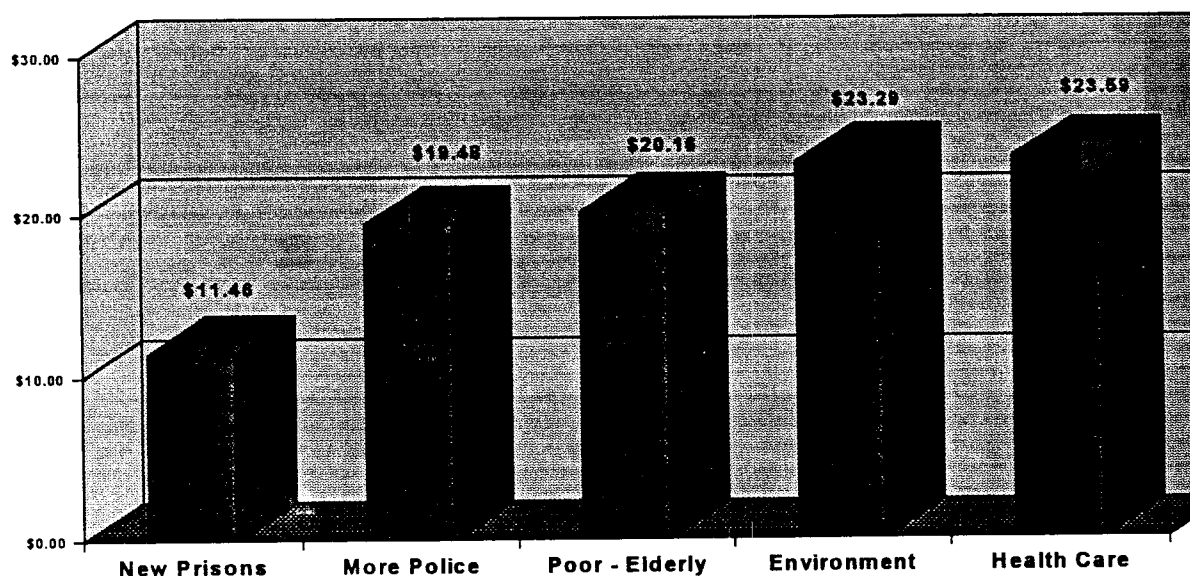


Figure 6. Shows that respondents are willing to spend \$11.46 out of their \$100 on new prisons. Second respondents are willing to spend \$19.48 out of their \$100 on more police protection. Third respondents are willing to spend \$20.16 out of their \$100 on the poor and the elderly. Fourth respondents are willing to spend \$23.29 out of their \$100 on the environment. Finally respondents are willing to spend \$23.59 out of their \$100 on health care.

## \$100 ALLOCATED ACROSS FIVE ENVIRONMENTAL POLICY AREAS

**Figure 7.**

Now, again assume you are a legislator and this time you have \$100 to spend on environmental protection. Your \$100 can be divided across one or more of the following five items: protecting air quality, protecting water quality, safe disposal of hazardous wastes, preserving natural areas, and protecting plant and animal species. How would you divide your \$100 across these areas?

- How much of this money would you spend on protecting air quality?
- How much of this money would you spend on protecting water quality?
- How much of this money would you spend on safe disposal of hazardous wastes?
- How much of this money would you spend on preserving natural areas?
- How much of this money would you spend on protecting plant and animal species?

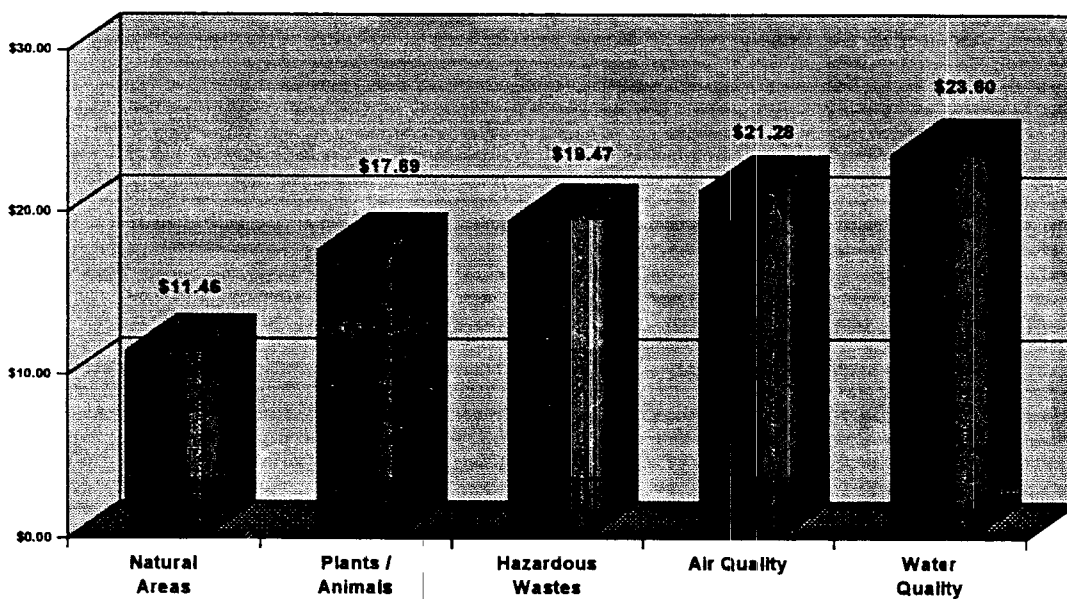


Figure 7. shows that respondents are willing to spend \$11.46 out of their \$100 on preserving natural areas. Second respondents are willing to spend \$17.69 out of their \$100 on protecting plant and animal species. Third respondents are willing to spend \$19.47 out of their \$100 on safe disposal of hazardous wastes. Fourth respondents are willing to spend \$21.28 out of their \$100 on protecting air quality. Finally respondents are willing to spend \$23.60 out of their \$100 on protecting water quality.

# ANNOTATED SURVEY

## ARIZONA COMPARATIVE ENVIRONMENTAL RISK PROJECT ANNOTATED SURVEY

1) First, are you a full time resident of Arizona, a part-time resident, or not a resident at all?

1)	Full-time	97%	
2)	Part-time	<u>3%</u>	N=779
		100%	

2) For how many years have you been a resident of Arizona? (Asked of Full-time Residents)

1)	Less than one year	4%	
2)	All my life	10%	N=774
3)	Years	<u>86%</u>	
		100%	

3) How many months of the year do you normally reside in Arizona? (Asked of Part Time Residents)

1)	4 months	11%	
2)	5 months	31%	
3)	6 months	37%	
4)	7 months	3%	N=21
5)	8 months	4%	
6)	9 months	11%	
7)	10 months	<u>3%</u>	
		100%	

4) What do you like most about living in Arizona?

1)	Climate	68%	
2)	Low taxes	1%	
3)	Clean air	3%	
4)	Nearness to relatives	2%	
5)	Desert; mountains/other natural formations	11%	N=799
6)	Access to tourist sites (eg. National parks, monuments)	1%	
7)	Lower cost of living (eg. housing, utilities)	2%	
8)	Low crime/safety	1%	
9)	Open Spaces/Low population	2%	
10)	Everything	1%	
11)	Nothing	1%	
12)	Friendly/Easy-Going	2%	
13)	It is Home	1%	
14)	Other	<u>5%</u>	
		101%	

- 5) Now I'm going to read you a short list of issues concerning Arizona. I would like you to tell me how much you are concerned about each one. Please rate your level of concern on a scale from 1 to 5, where a '1' means this issue is of no concern to you at all and a '5' means the issue is of great concern to you.

Crime in Arizona	No concern	2%	N=799
	Not Too concerned	3%	
	Moderately concerned	12%	
	Somewhat concerned	15%	
	Great concern	68%	
	Don't know	<u>    </u>	
		100%	
Education in the state	No concern	3%	N=799
	Not too concerned	4%	
	Moderately concerned	18%	
	Somewhat concerned	17%	
	Great concern	56%	
	Don't know	<u>  2%</u>	
		100%	
Environment	No concern	3%	N=799
	Not too concerned	6%	
	Moderately concerned	24%	
	Somewhat concerned	23%	
	Great concern	44%	
	Don't know	<u>  1%</u>	
		101%	
Jobs and taxes in Arizona	No concern	5%	N=799
	Not too concerned	5%	
	Moderately concerned	25%	
	Somewhat concerned	23%	
	Great concern	40%	
	Don't know	<u>  2%</u>	
		100%	

- 6) Now I'll ask you a few questions about the environment. Here are three statements that people sometimes make when discussing the environment and economic growth. Which of these statements comes closer to your own point of view? One: Economic growth should be given priority, even if the environment suffers to some extent. Two: Protection of the environment should be given priority, even if economic growth suffers to some extent. Or, Three: We can have economic growth and environmental protection at the same time.

1) Economic growth should be given priority	6%	
2) Environmental protection should be given priority	20%	
3) Both economic growth and environmental protection	74%	N=799
4) Depends	—	
5) Neither	—	
6) Don't Know	<u>1%</u>	
	101%	

- 7) When you think about the air you breathe, the water you drink, and the overall quality of the environment, would you say the community in which you live is good for your health, bad for your health, or doesn't affect your health at all?

1) Good for health	37%	
2) Bad for health	32%	
3) Doesn't affect health at all	21%	N=799
4) Depends	8%	
5) Don't know	<u>2%</u>	
	100%	

- 8) Over the last five (5) years, would you say the community in which you live has become better for your health, worse for your health, or hasn't changed at all?

1) Better for your health	9%	
2) Worse for your health	34%	
3) Hasn't changed	51%	N=799
4) Depends	2%	
5) Don't know	<u>5%</u>	
	101%	

Now I'm going to read you a list of environmental topics that some Arizonans are concerned about. I would like you to tell me how concerned you are about each topic. Please rate your level of concern on a scale from 1 to 5, where a '1' means this topic is of no concern to you at '5' means the topic is of great concern to you.

9) The air you breath outdoors

No concern	4%	
Not too concerned	5%	
Moderately concerned	13%	N=799
Somewhat concerned	18%	
Great concern	60%	
Don't know	—	
		100%

10) The quality of rivers, lakes and streams

No concern	4%	
Not too concerned	3%	
Moderately concerned	21%	N=799
Somewhat concerned	22%	
Great concern	49%	
Don't know	2%	
	101%	

11) Disposal of hazardous wastes

No concern	3%	
Not too concerned	4%	
Moderately concerned	10%	N=799
Somewhat concerned	13%	
Great concern	68%	
Don't know	2%	
	100%	

12) Conditions of fish, game and wildlife

No concern	5%	
Not too concerned	4%	
Moderately concerned	21%	N=799
Somewhat concerned	21%	
Great concern	45%	
Don't know	4%	
	100%	

## 13) Population Growth in the States

No concern	8%	
Not too concerned	8%	
Moderately concerned	30%	N=799
Somewhat concerned	17%	
Great concern	37%	
Don't know	<u>    </u>	
	100%	

## 14) Bacteria and organisms in your food

No concern	7%	
Not too concerned	8%	
Moderate concern	15%	N=799
Somewhat concerned	13%	
Great concern	55%	
Don't know	<u>2%</u>	
	100%	

## 15) Availability of safe drinking water in the Future

No concern	3%	
Not too concerned	2%	
Moderately concerned	8%	N=799
Somewhat concerned	13%	
Great concern	74%	
Don't know	<u>    </u>	
	100%	

## 16) Disposal of Garbage and Other Household Wastes

No concern	4%	
Not too concerned	4%	
Moderately concerned	19%	N=799
Somewhat concerned	22%	
Great concern	50%	
Don't know	<u>1%</u>	
	100%	

17)	<b>Tobacco Smoke Inside Buildings</b>		
	No concern	17%	
	Not too concerned	5%	
	Moderately concerned	18%	N = 799
	Somewhat concerned	12%	
	Great concern	47%	
	Don't know	<u>1%</u>	
		100%	
18)	<b>Radon in Buildings</b>		
	No concern	13%	
	Not too concerned	10%	
	Moderately concerned	22%	N = 799
	Somewhat concerned	14%	
	Great concern	31%	
	Don't know	<u>12%</u>	
		102%	
19)	<b>Exposures to Chemicals or Pesticides While Working</b>		
	No concern	12%	
	Not too concerned	8%	
	Moderately concerned	19%	N = 799
	Somewhat concerned	17%	
	Great concern	43%	
	Don't know	<u>2%</u>	
		101%	
20)	<b>Pollens and Other Things in the Air That Some People Are Allergic To</b>		
	No concern	17%	
	Not too concerned	10%	
	Moderately concerned	30%	N = 799
	Somewhat concerned	15%	
	Great concern	28%	
	Don't know	<u>  </u>	
		100%	

## 21) The quality of water you drink

No concern	4%	
Not too concerned	3%	
Moderate concern	9%	N = 799
Somewhat concerned	15%	
Great concern	70%	
Don't know	<u>    </u>	
	101%	

## 22) Pesticides and chemicals in your food

No concern	6%	
Not too concerned	4%	
Moderately concerned	17%	N = 799
Somewhat concerned	17%	
Great concern	56%	
Don't know	<u>  1%</u>	
	101%	

## The Condition of Forests, Deserts, and other natural areas

No concern	3%	
Not too concerned	3%	
Moderately concerned	18%	N = 799
Somewhat concerned	23%	
Great concern	53%	
Don't know	<u>  1%</u>	
	100%	

## Natural hazards like floods, earthquakes and forest fires and other accidents

No Concern	17%	
Not Too Concerned	14%	
Moderately concerned	31%	N = 799
Somewhat concerned	15%	
Great Concern	23%	
Don't know	<u>  1%</u>	
	101%	

## 25) Exposure to poisons from spills

No concern	10%	
Not too concerned	11%	
Moderately concerned	24%	N = 799
Somewhat concerned	18%	
Great concern	37%	
Don't know	<u>1%</u>	
	101%	

## 26) Condition of important historic places such as historic buildings or ancient ruins

No concern	4%	
Not too concerned	8%	
Moderately concerned	26%	N = 799
Somewhat concerned	22%	
Great concern	38%	
Don't know	<u>1%</u>	
	99%	

## 27) Ultraviolet radiation from the sun

No concern	13%	
Not too concerned	9%	
Moderately concerned	24%	N = 799
Somewhat concerned	20%	
Great concern	32%	
Don't know	<u>2%</u>	
	100%	

## 28) Global warming

No concern	19%	
Not too concerned	9%	
Moderately concerned	25%	N = 799
Somewhat concerned	18%	
Great concern	26%	
Don't know	<u>4%</u>	
	101%	

Which of the following statements best describes your feelings about environmental regulation in Arizona: One, The government overemphasizes environmental regulation at the expense of economic growth. Two, the government overemphasizes economic growth at the expense of the environment in Arizona. Or, Three, the government provides a good balance between environmental regulation and economic growth in Arizona?

1) Environmental protection is overemphasized	15%	
2) Economic growth is overemphasized	48%	N = 799
3) Good balance	28%	
4) Don't know	9%	
5) Refused	<u>1%</u>	
	101%	

And now I'd like to read you a set of statements regarding the environment. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each statement.

The environment is an interconnected whole. If you alter any one part, many other parts are affected.

1) Strongly agree	54%	
2) Somewhat agree	35%	
3) Somewhat disagree	6%	N = 799
4) Strongly disagree	2%	
5) Not sure/depends	<u>3%</u>	
	100%	

31) The purpose of plants and animals is to serve the needs of human beings. If something doesn't help human life, we don't need to protect it.

1) Strongly agree	7%	
2) Somewhat agree	11%	
3) Somewhat disagree	25%	N = 795
4) Strongly disagree	54%	
5) Not sure/depends	<u>3%</u>	
	100%	

We must protect the environment even if it means that some jobs in the local community are lost.

1) Strongly agree	27%	
2) Somewhat agree	42%	
3) Somewhat disagree	17%	N = 799
4) Strongly disagree	9%	
5) Not Sure/depends	<u>6%</u>	
	101%	

33) My first duty is to provide for myself and my family. Protecting the environment has to come after that.

1) Strongly agree	29%	
2) Somewhat agree	35%	
3) Somewhat disagree	20%	N=797
4) Strongly disagree	10%	
5) Not sure/depends	<u>5%</u>	
	99%	

34) We have to protect the environment for our children and our grandchildren even if it means reducing our standard of living today.

1) Strongly agree	46%	
2) Somewhat agree	35%	
3) Somewhat disagree	11%	N=799
4) Strongly disagree	6%	
5) Not sure/depends	<u>3%</u>	
	101%	

We can have a thriving economy even if we do not protect the environment.

1) Strongly agree	8%	
2) Somewhat agree	16%	
3) Somewhat disagree	27%	N=798
4) Strongly disagree	44%	
5) Not sure/depends	<u>4%</u>	
	99%	

Industry should pay for the environmental harm they cause.

1) Strongly agree	78%	
2) Somewhat agree	15%	
3) Somewhat disagree	3%	N=797
4) Strongly disagree	1%	
5) Not Sure/depends	<u>2%</u>	
	99%	

37) Now, increased protection of the environment could lead to higher costs for goods and services. Would you be willing to pay these higher costs to protect the environment?

1) Yes	67%	
2) No	14%	N = 799
3) Depends	17%	
4) Don't know/refused	<u>2%</u>	
	100%	

38) Increased protection of the environment could lead to higher taxes. Would you be willing to pay higher taxes so that government could better protect the environment?

1) Yes	52%	
2) No	28%	N = 799
3) Depends	18%	
4) Don't know/refused	<u>2%</u>	
	100%	

39) I am interested in knowing how much money you are willing to pay each year in amounts. Please stop me when I get to a range that includes the amount of higher taxes you are willing to spend each year for environmental protection.

1) \$500 or more	13%	
2) \$200 to \$499	24%	
3) \$100 to \$199	27%	
4) \$55 to \$99	13%	
5) \$35 to \$54	5%	N = 558
6) \$1 to \$34	5%	
7) No increase	1%	
8) It depends	8%	
9) Don't know/refused	<u>3%</u>	
	99%	

Assume you are a legislator and you have \$100 to spend on government programs. Your \$100 can be divided across one or more of the following five policy areas: environmental protection, health care, aid for the poor and elderly, prison construction, and police protection. How would you divide your \$100 across these areas?

- 40) How much of this money would you spend on environmental protection?  
 Mean=\$23.29      N=788
- 41) How much of this money would you spend on health care?  
 Mean=\$23.59      N=789
- 42) How much of this money would you spend on aid for the poor and elderly?  
 Mean=\$20.16      N=787
- 43) How much of this money would you spend on prison construction?  
 Mean=\$11.46      N=788
- 44) How much of this money would you spend on police protection?  
 Mean=\$19.48      N=788

Now, again assume you are a legislator and this time you have \$100 to spend on environmental protection. Your \$100 can be divided across one or more of the following five items: protecting air quality, protecting water quality, safe disposal of hazardous wastes, preserving natural areas, and protecting plant and animal species. How would you divide your \$100 across these areas?

- 45) How much of this money would you spend on protecting air quality?  
 Mean=\$21.28      N=791
- 46) How much of this money would you spend on protecting water quality?  
 Mean=\$23.60      N=791
- 47) How much of this money would you spend on safe disposal of hazardous wastes?  
 Mean=\$19.47      N=791
- 48) How much of this money would you spend on preserving natural areas?  
 Mean=\$16.70      N=791
- 51) How much of this money would you spend on protecting plant and animal species?  
 Mean=\$17.69      N=791

D1. Please rate how strongly you feel about the environment on a scale from 1 to 10 where '1' means you have no concern about the environment whatsoever and '10' means you are very concerned about the environment.

D2. Do you currently belong to or contribute money to any environmental organizations?

1) Yes	20%	
2) No	76%	N = 799
3) Don't know	3%	
4) Refused	<u>1%</u>	
	100%	

D3. Regardless of the political party you might favor, when it comes to politics, do you consider yourself liberal, conservative, or somewhere in between?

1) Liberal	15%	
2) Conservative	28%	N = 799
3) In between	51%	
4) Other	2%	
5) No answer/Don't know	<u>4%</u>	
	100%	

D4. Do you lean more toward the liberal side or the conservative side of politics?

1) Liberal	23%	
2) Conservative	36%	N = 442
3) Other/Neither	25%	
4) No answer/Don't know	<u>16%</u>	
	100%	

D5. Do you have a high school diploma or GED?

1) Yes	93%	
2) No	6%	N = 799
3) Don't know/no answer	<u>1%</u>	
	100%	

D6. Did you ever attend school after receiving your high school diploma or GED?

1) Yes	85%	
2) No	15%	N = 746
3) Don't know/no answer	<u>---</u>	
	100%	

D7. Was this a four year college or university, a community college, or a technical school?

1) Four Year College/University	54%	
2) Junior/Community College	27%	
3) Technical School	16%	N=634
4) Other	2%	
5) No Answer/Don't know	<u>    </u>	
	99%	

Did you graduate? (IF RESPONDENT IS STILL ATTENDING THE ANSWER IS NO)

1) Yes	65%	
2) No	34%	N=634
3) Don't know/No answer	<u>1%</u>	
	100%	

Do you primarily consider yourself to be white, American Indian, Hispanic, Black, Asian American, or something else?

1) White	78%	
2) American Indian	2%	
3) Hispanic	11%	
4) Black	2%	N=799
5) Asian American	2%	
6) Not Determined	1%	
7) Something Else	<u>5%</u>	
	101%	

D10. Do you consider yourself Protestant, Catholic, Mormon, Jewish, Muslim, or something else?

1) Protestant	32%	
2) Catholic	27%	
3) Mormon	5%	
4) Jewish	1%	N=799
5) Christian	5%	
6) Native American Church	—	
7) None/Atheist/Agnostic	8%	
8) No Answer/Don't Know	8%	
9) Other	<u>14%</u>	
	100%	

Do you own or rent your home?

1) Rent	27%	
2) Own	68%	N=799
3) Neither	4%	
4) No Answer/Don't Know	<u>2%</u>	
	101%	

Would you describe the place you live as a big city, the suburbs or outskirts of a big city, a small city or town, or a farm or home in the country.

1) Big City	33%	
2) Suburbs	32%	
3) Small City/Town	28%	N=799
4) Farm/Country Home	6%	
5) Don't know	—	
6) Refused	<u>1%</u>	
	100%	

In what year were you born?

- 1) Refused/Don't know
- 2) Year (Enter All Four Digits)

D14. Are you single, married, divorced or widowed?

1) Single	26%	
2) Married	54%	
3) Divorced	12%	N=799
4) Widowed	7%	
5) Don't know	—	
6) Refused	<u>1%</u>	
	100%	

Do you have any children?

1) Yes	68%	
2) No	31%	N=799
3) Don't know/Maybe	1%	
4) Refused	<u>1%</u>	
	101%	

D15a. How many of your children are currently living with you?

1) None	44%	
2) One	21%	
3) Two	21%	
4) Three	8%	N=515
5) Four	3%	
6) Five	1%	
7) Six	1%	
8) Eight	<u>    </u>	
	99%	

D16. Are you currently employed, unemployed but looking for work, unemployed but not looking for work, temporarily laid off, or retired?

1) Employed	60%	
2) Unemployed	11%	
3) Temporarily laid off	2%	
4) Retired	23%	N=799
5) Something else	4%	
6) Don't know	-	
7) Refused	<u>1%</u>	
	101%	

D16a. Which of the following categories best describes your job: farmer, manager, small business owner, sales worker, factory worker, white collar professional,

1) Farmer	2%	
2) Manager	17%	
3) Small business owner	12%	
4) Sales worker	12%	
5) Factory worker	6%	N=475
6) White collar professional	28%	
7) Other	23%	
8) Don't know	1%	
9) Refused	<u>1%</u>	
	102%	

D17. So that we can group all answers, is your total family income before taxes under \$30,000, between \$30,000 and \$60,000, or over \$60,000.

1) Under \$30 K	35%	
2) \$30 K to \$60 K	37%	N=799
3) Over \$60 K	19%	
4) Don't Know Refused	<u>9%</u>	
	100%	

Is that under \$10,000, \$10,000 to \$20,000, or over \$20,000?

1) Under \$10 K	16%	
2) \$10 K to \$20 K	41%	
3) Over \$20 K	41%	N=277
4) Don't Know/Refused	<u>2%</u>	
	100%	

Is that under \$40,000, \$40,000 to \$50,000, or over \$50,000?

1) Under \$40 K	38%	
2) \$40 K to \$50 K	36%	
3) Over \$50 K	21%	N=298
4) Don't Know/Refused	<u>4%</u>	
	99%	

Is that under \$70,000, or over \$70,000?

1) Under \$70 K	32%	
2) Over \$70 K	63%	N=155
3) Don't Know/Refused	<u>6%</u>	
	101%	

D22. Indicate the sex of the respondent

1) Female	50%	
2) Male	50%	N=799
3) Unsure/Don't know	<u>==</u>	
	100%	

D23. PLEASE ENTER THE NAME OF THE COUNTY FROM CALL BACK FORM.

1) APACHE	2%	6) GREENLEE	0.3%	11) PIMA	19%
2) COCHISE	3%	7) LA PAZ	1%	12) PINAL	3%
3) COCONINO	2%	8) MARICOPA	59%	13) SANTA CRUZ	1%
4) GILA	1%	9) MOHAVE	3%	14) YAVAPAI	3%
5) GRAHAM	1%	10) NAVAJO	2%	15) YUMA	3%

N=799