Report To The Consumer On Water Quality

January 1, 2006 – December 31, 2006

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúscalo ó hable con alguien que lo entienda bien.

Díí kwe'é naaltsoos hasht'eelyaayíí 'éí nit haz'ánígi tó baa 'áháyáá dóó yá'át'ééh óolzinígíí yaa halne'. Doo bik'i'dinitį̈hgóó da, t'áá háida ta' níká'doolwot dóó hazhó'ó yee nit ch'íhodoo'áát.

Utilities Director Letter

Dear Water Consumer,

Flagstaff continues to experience the effects of an extended drought. According to the National Weather Service, the fall of 2006 was the 37th driest on record over the past 108 years. Many were expecting an anticipated El Niño event to bring the moisture we have been seeking, however we only received 3.02" of liquid precipitation from September 21st through December 20th (calendar fall season) compared with 5.60" which is the climatological mean.

A total of 6.4" of snowfall was recorded at the Flagstaff Airport (for this same period) and was about 26% of the climatological mean of 24.4". This ranks as the 29th least amount of snow recorded since weather records began in 1898.

El Niño events usually occur (on average) about every 3 to 5 years. The effects of El Niño are most commonly felt in Arizona during the true winter and early spring months (January through April).

An accumulated snowpack , associated with a rapid thaw provide the optimum conditions for an effective run-off into the Lake Mary Watershed. Upper Lake Mary capacity is currently near 20% and we remain hopeful that wet spring weather will contribute to our surface water supply.

We started the new year with an adjusted water rate structure for utility services and are pleased to provide a convenient new service to view your water bill and pay on-line at the City of Flagstaff's website: **www.flagstaff.az.gov**

UTILITY DEPARTMENT ACCOMPLISHMENTS

- Updated Utilities Capital Improvement Program
- New water & sewer fees adopted
- Value engineered Wildcat Plant Improvements
- Completed Lone Tree water line extension
- Completed Walgreen's sewer relocation
- Completed Rio Well Equiping
- Completed modifications to North Reservoirs for removal from State hazardous dams list
- Completed remodel of Lake Mary Water Plant
- Completed water quality study for ADEQ
- Leased Red Gap Ranch for grazing
- Completed 4,279 utility locates
- Revised Reimbursement Ordinance for water and sewer line extensions

The department is actively involved in several environmental and water conservation projects that have much community interest and participation.

PICTURE CANYON PROJECT

The Rio de Flag is the primary watercourse winding through Flagstaff. The stream channel is ephemeral or intermittent depending on the season or local geology.

Picture Canyon is located below the City's Wildcat Hill Wastewater Treatment Plant, which provides a perennial water source.

The stream runs through a narrow basalt canyon and supports an existing wetland plant community watered by the upstream effluent discharges.

The canyon has attracted significant community interest, resulting in several area wide clean-up activities (removal of trash, debris and old car bodies), archeological surveys and environmental evaluations.

Graphic by David Mckee

PICTURE CANYON
FLAGSTAFF, ARIZONA

The City of Flagstaff is an active participant in the "Picture Canyon Core Group" an ad hoc committee formed by Deb Hill, Coconino County Board of Supervisors to address the common desire we each have of protecting this unique environmental and cultural resource.

Sometime in the past, the stream channel below the canyon was channelized removing a number of natural meanders. Existing vegetation primarily consists of patches of bullrush in the channel proper. Noxious weeds, such as Yellow starthistle and Scotch thistle have also invaded the area.

The result is a significant narrowing of the riparian area and a rapid transit of the perennial stream flow. The lack of an active floodplain reduces the volume and extent of soil moisture resulting in a decline or elimination of riparian and wetland areas.

Recognizing these concerns, in 2006 the City of Flagstaff - Utilities Department submitted a proposal to the Arizona Department Of Water Resources and was successfully selected to receive a grant ($ 330,225.00) from the Arizona Water Protection Fund to begin a restoration project.

The goals of the project are to restore the fluvial processes of the Rio de Flag and enhance the riparian corridor for habitat, recreation, and aesthetics in the vicinity of Picture Canyon. Specific objectives include eliminating noxious weeds; restoring channel meander and floodplain function; restoring native riparian and wetland plant communities; increasing plant species diversity; creating additional wetland habitats; improving water quality; increasing wildlife habitat; and providing recreation and aesthetic benefits.

Public involvement opportunities will be posted on the City of Flagstaff Website.

RIO WETLANDS PROJECT

For the last several years we have coordinated activities to improve habitat conditions in the Rio Wetlands. The project area is located in the Rio de Flag corridor adjacent to the FUTS Trail and the Rio de Flag Water Reclamation Plant.

Rio Outfall 001 provides a sustained reclaimed water discharge of 100 gallons a minute (or more) contributing to the wetlands vitality.

Working closely with the Army Corps of Engineers and the Arizona Game & Fish Department a biological assessment of the area was completed identifying sensitive species and guiding restoration and wildlife habitat enhancement efforts.

Volunteers have also successfully planted additional native plants and duck nest structures have been installed within the wetlands. Recently the construction of the I-40 bridges across the Rio de Flag were completed. The area will look good this spring and you are invited to see these projects.

To further enhance the attributes of the Rio Wetlands, interpretive signs have been installed along the FUTS Trail. The signs were designed and edited by Life Drawing & Education, illustrated by Zachery Zdinak and funded by the Arizona Game & Fish Heritage Fund. We would like to thank all project participants and volunteers for their time, efforts and community service.

FRANCIS SHORT POND

As you know Francis Short Pond was previously dredged and improved, restoring it's original character, in Phase 1 of Heritage Fund grant from the Arizona Game & Fish Department.

Phase 2 funding will provide an educational component with an environmental curriculum being developed by the Willow Bend Environmental Education Center. We recently applied for a grant for Phase 3 of the project , that will include an encompassing trail, interpretive signs, informational kiosks and equipment to provide pond aeration.

WATER CONSERVATION PROGRAMS

Recently Adam Miller advanced his career in water management and is now the Water Conservation Director for the City of Phoenix. Adam was instrumental in developing and establishing a strong foundation for our community water conservation programs. We wish him well.

Ellen Ryan has assumed the duties of the Water Conservation Manager and has hit the ground running. She will continue to promote awareness and the communities desire to have a comprehensive and successful water conservation program.

Once again, the Water Conservation Program in cooperation with the Arizona Department of Water Resources and the Flagstaff Unified School District promoted the **"Project WET – Flagstaff Water Festival"** hosted by NAU at the Walkup Skydome.

This water education endeavor was attended by all fourth grade students within FUSD including charter and home school students. The City of Flagstaff extends their appreciation to Northern Arizona University, and the businesses, volunteers, conservation aides and teachers who contributed to insure the overall success of this annual event.

Arizona Water Festivals are coordinated through the University of Arizona Water Resources Research Center Arizona Project WET program. Project WET, USA, with support of Nestle Waters, sponsors the "National Make a Splash with Project WET" effort with water festivals reaching over 52,000 students across the U.S. celebrating National Water Education Day.

Some Important Things to Remember About the City of Flagstaff Water Conservation Strategies…

Water customers are reminded of the year around "water conservation strategies" which require alternating watering schedules.

- Water restrictions will be enforced on a continual basis
- An Odd/Even irrigation schedule is in effect year around
- Odd-numbered addresses may irrigate Tuesday, Thursday, and Saturday
- Even-numbered addresses may irrigate Wednesday, Friday, and Sunday
- Irrigation is restricted to incidental hand watering on Mondays
- No irrigation is allowed between the hours of 9 AM and 5 PM
- Incidental hand watering is allowed daily except between the hours of 9 AM and 5 PM
- Hand watering requires that the water conveyance (hose, bucket, etc.) be in hand for the duration of a watering session. Hoses running freely, or sprinklers attached to hoses are not considered hand watering.
- Landscape Establishment Permits are available at the Utilities Administration Office in City Hall. Permits authorize daily irrigation for a maximum of 30 days to establish new landscapes. Irrigation hours still apply. There is a $10 fee and proof of new landscape is required. Accepted proofs include a purchase receipt or landscaper's design plan.
- Commercial Provisions are available for businesses that require daily outdoor water use for the business to succeed, such as landscape nurseries.
- Requests for a Commercial Provision must be made in writing to the Utilities Director. Commercial provisions will not be approved for aesthetic landscaping.

- Vehicle washing is allowed under Strategy I. A cut-off nozzle and bucket is encouraged to reduce unnecessary run-off into the street.
- Non-compliance with Strategy I could result in a $25.00 fee assessed to your water bill. The fee will double with each repeat violation.

Your water utility continues to strive for excellence and promote wise water usage through education, awareness and resource conservation

XERISCAPE CONTEST

Do you plan to change your landscape at your home or business this season to be more water efficient? Do you plan to follow the Seven Principles of Xeriscape? Will you choose plants from the Flagstaff Fabulous Plants guide? If you are answering "yes", consider entering the second annual Flagstaff Xeriscape Contest! Judging occurs in August with an entry deadline in July. The entry brochure can be obtained by contacting the Water Conservation office at 779-7685 Ext. 4827 or by viewing "xeriscape" on the website: www.flagstaff.gov/waterconservation.

To Find Out More About Your Community Water Conservation Programs And Available Rebates Visit The City Of Flagstaff Website At:

www.flagstaff.az.gov

WATER PRODUCTION

During 2006 low reservoir levels (Upper Lake Mary) required increased ground water pumping from the Lake Mary, Woody Mountain and Local Wellfields.

Water Production Source	Water Production (MG) 2006	Water Production (MG) 2005	% Of Last Year
Lake Mary Surface Water	506 Million Gallons	1196 Million Gallons	**Down** 58 %
Lake Mary Wellfield	840 Million Gallons	361 Million Gallons	**Up** 233 %
Woody Mountain Wellfield	832 Million Gallons	579 Million Gallons	**Up** 144 %
Inner Basin North RFP	190 Million Gallons	215 Million Gallons	**Down** 12 %
Local Wells	432 Million Gallons	308 Million Gallons	**Up** 140 %
TOTAL PRODUCTION	**2799 MG**	**2658 MG**	**Up** 5.28 %
POPULATION BASE	**62,718**	**PER CAPITA (Gallons Per Day)**	**124 GPD**

The mission of the Utilities Department is to professionally and cost effectively provide water and wastewater services that meet the present and future environmental, health, and safety needs of the community and our co-workers.

We are committed to a goal of 100% customer satisfaction. This will be achieved by a dedication to exceed customer expectations by continuously improving our operations. We value our co-workers and strive to maintain high motivation by providing an environment that encourages improvement and teamwork.

Water Quality is always of paramount importance and I am pleased to present you the **2006 City of Flagstaff** ***Report to the Consumer on Water Quality***.

This annual report outlines where your drinking water comes from, how it is treated, and the results of tests performed on the quality of Flagstaff's drinking water.

Additionally, as mandated by the U.S. Environmental Protection Agency, this report informs you of contaminant levels in your drinking water, as well as violations incurred last year, among other important health information. **Thank you.**

Ron Doba
Director, Utilities Department

Consumer Confidence Report – 2006

IS MY WATER SAFE?

During 2006, 1340 water samples were taken and analyzed to ensure compliance with all the standards required by the Safe Drinking Water Act. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards.

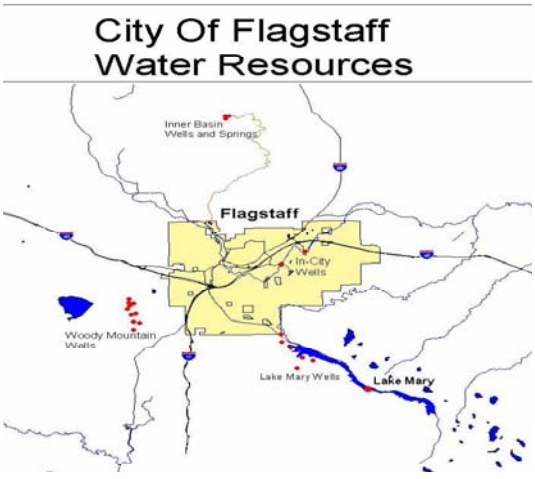
DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to illness than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

WHERE DOES MY WATER COME FROM?

In 2006 the Utilities Department distributed approximately 2798.82 million gallons of water an average 0f 7.67 million gallons per day.. Total water production was up 5.28 % over last year.



The City of Flagstaff is supplied by surface water from Upper Lake Mary and the Inner Basin of the San Francisco Peaks. We also pump groundwater from the Woody Mountain Wellfield, Lake Mary Wellfield, and other Local Wells, which tap the Coconino and Supai Aquifers. These sources blend in the water distribution system and the amount of water coming from each source varies throughout the year.

SOURCE WATER ASSESSMENT AND IT'S AVAILABILITY

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Based on a mandate set forth in the 1996 amendments to the Safe Drinking Water Act, ADEQ evaluated each water source used by public water systems in Arizona. These evaluations assessed the hydrogeology of drinking water sources to determine the quality of groundwater being drawn into wells, evaluated the watersheds supplying surface water, and surveyed land use activities occurring near drinking water sources. This information is now used to determine the degree to which a public drinking water source is protected from, or at risk of, contamination. It is also used to assist local communities in implementing source water protection measures.

Adjacent land uses within a specified proximity to a drinking water source, or the designated source water assessment area, can now be evaluated by ADEQ to determine if they are in fact posing a contamination risk. ADEQ has compliance information (occurrence data) on all public water systems in Arizona as well as many of the land uses found within drinking water source water assessment areas.

Because of this customized approach in studying each individual system, the source water assessment reports allow for better protection of drinking water and allow ADEQ to tailor monitoring requirements specific to each system where appropriate. For example, if a water system has no history of contamination by a particular chemical, as well as no potential for future contamination (based on land use practices and the risk they might pose to water sources), then monitoring relief or reduced monitoring for that chemical may be granted for that system. Another water system with a history of problems or the potential for contamination with the same chemical would still be required to monitor for that substance.

ADEQ is confident that these assessments and the related source water protection activities are instrumental in preserving drinking water safety.

Arizona's Source Water Assessment Plan
http://www.azdeq.gov/environ/water/dw/download/swapplan.pdf

To review Source Water Assessment Reports for public water systems visit
http://www.azdeq.gov/environ/water/dw/swap.html

WHY ARE THERE CONTAMINATES IN MY DRINKING WATER?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

Contaminants That May Be Present In Source Water

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Microbial Contaminants: Viruses, bacteria, and protozoan, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Microbial contaminants can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with compromised immune systems.

Inorganic Contaminants: Salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. Certain inorganic contaminants consumed at levels in excess of the maximum contaminate level (MCL) may result in skin damage, circulatory problems, liver problems, kidney damage, and increased risk of cancer

Pesticides and Herbicides: Which may come from a variety of sources such as agriculture, storm-water runoff, and residential uses. Pesticides and herbicides consumed at levels greater than the required MCL may result in increased risk of blood problems, reproductive difficulties, kidney and liver damage, and increased risk of cancer.

Synthetic and Volatile Organic Chemical Contaminants: Which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems.

Radioactive Contaminants: Which can be naturally occurring or be the result of oil and gas production and mining activities. Radioactive contaminants may result in an increased risk of getting cancer.

DRINKING WATER REGULATIONS

Haloacetic Acids: Haloacetic acids (HAA5) are disinfection by-products that are formed when chlorine is used as the disinfectant. These compounds can increase the risk of cancer, and became regulated as of January 1, 2002 with a MCL of 60 ppb.

Total Trihalomethanes: Total Trihalomethanes (TTHMs) are disinfection by-products that are formed when chlorine is used as the disinfectant. These compounds can increase the risk of cancer, and became regulated as of January 1, 2002 with a MCL of 80 ppb.

Maximum Residual Disinfection Level (MRDL): Regulations for Maximum Residual Disinfection Level set a maximum limit for the running annual average MRDL at 4.0 ppm for chlorine.

TOC Removal Requirements: Control of disinfection by-product precursors has brought new regulations governing TOC removal requirements. TOC removal is accomplished through enhanced coagulation or enhanced softening. Regulations require a 50% TOC removal when the raw water TOC concentration is >8mg/L and alkalinity is <60mg/L. Violations occur when the ratio of the amount of actual TOC removal divided by the required amount of TOC removal is <1.

Long Term 2 Enhanced Surface Water Treatment Rule: Implemented in 2006 is designed to reduce the disease incidence associated with Cryptosporidium and other pathogenic organisms by building on existing rules.

HOW CAN I GET INVOLVED?

It is the obligation of the Utilities Department to provide a safe and adequate supply of drinking water. To help please our customers and meet our obligation, the Utilities Department strongly encourages public input and community participation on decisions affecting your water resources.

Regular Flagstaff Water Commission meetings are held the third Thursday of each month. Meeting locations are posted on the official City bulletin board at City Hall. Meetings begin at 4:00 PM and you are always welcome.

Copies of this report are available at the Utilities Administration Office, City Hall, 211 West Aspen Avenue, Flagstaff, AZ 86001, or on our web site at:

www.flagstaff.az.gov

This report provides you with valuable information about Your drinking water that is easy to understand.

We hope the results found in this report confirm that you can count On the City of Flagstaff for quality at the tap.

MONITORING AND REPORTING OF COMPLIANCE DATA VIOLATIONS

Turbidity is a continuously monitored water quality parameter and is a measure of the cloudiness of the water. Regulations require that individual and combined filter effluents are monitored for turbidity.

There are several safeguards, which provide additional levels of protection to predict water quality beyond the filters. These include an ultraviolet disinfection process and chlorine disinfection with contact time within the plant clear wells.

The City was required to publish a public notice for one monitoring violation. On February 5, 2006 individual filter turbidity measurements were not taken for 18 hours due to a burned out bulb on a monitor. The bulb was replaced and monitoring capability was restored.

SURFACE WATER TREATMENT RULE FILTRATION AND DISINFECTION VIOLATIONS

The City was required to publish public notices for two treatment violations:

- On July 13, 2006 the chlorination system went into emergency shut down at the North Reservoirs Filtration Plant for 9 hours. The probable cause was an irregularity in the power supply. A new hard-wired system has been installed to correct this problem.

Tests taken during the time of the violation indicated that there were normal chlorine levels in the distribution system and in the storage reservoirs and no bacteria were detected.

- On June 22, 2006 the maximum contaminant level for turbidity was exceeded for 35 minutes due to a problem with the backwash process. Modifications in the automatic controls have been done to prevent this from reoccurring. The chlorine and ultraviolet disinfection systems were working properly at the time of the problem.

RESULTS OF RADON MONITORING

Currently there is no federally-enforced drinking water standard for radon. Analysis done in 2006 on Flagstaff water found it to range from 237 pCi/l to 559 pCi/L. Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

ADDITIONAL INFORMATION FOR ARSENIC

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

CITY OF FLAGSTAFF
2006 WATER QUALITY TABLE

WHAT DOES THE WATER QUALITY TABLE MEAN?

The Water Quality Table lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Thank you for reading this important information on your water's quality
We'll be happy to answer your questions about the
City of Flagstaff's Water Supply

WATER QUALITY INFORMATION:

Jack Rathjen, Water Production Manager
Lake Mary Water Treatment Plant at (928) 774 - 0262

CONSUMER CONFIDENCE REPORT INFORMATION:

John Davison, Program Assistant
Utilities Administration at (928) 779 - 7685 x4838

FIND INFORMATION ABOUT YOUR WATER SYSTEM ON THE CITY OF FLAGSTAFF WEBSITE AT:

www.flagstaff.az.gov

Water quality data for community water systems throughout the United States is also available at:
Environmental Protection Agency - Local Drinking Water Information
http://www.epa.gov/safewater/dwinfo/index.html

UTILITIES DEPARTMENT
Water Quality Table 2006

Highlighted In Red: Corrections (note these corrections that are different from what was printed in Cityscape Spring 2007)

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range Low	Range High	Sample Date	Violation	Typical Source
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Chlorine (as Cl2) (ppm)	4	4	0.59	0.06	1.22	2006	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	12.4	1.9	42.0	2006	No	By-product of drinking water chlorination
Total Organic Carbon (% Removal)	NA	TT	50	NA		2006	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	NA	80	19.3	0.5	68.0	2006	No	By-product of drinking water disinfection
Inorganic Contaminants								
Arsenic (ppb)	0	10	8	1	8	2006	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	1	0.11	1	2006	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	3.6	NA	3.6	2006	No	Discharge from steel and pulp mills; Erosion of natural deposits

UTILITIES DEPARTMENT
Water Quality Table 2006

Fluoride (ppm)	4	4	0.67	0.06	0.67	2006	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.6	0.12	1.6	2006	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Thallium (ppb)	0.5	2	1.3	NA	1.3	2006	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories
Microbiological Contaminants								
Fecal coliform/E. coli (positive samples)	0	0	0	NA	NA	2006	No	Human and animal fecal waste
A violation occurs when a routine sample and a repeat sample, in any given month, are total coliform positive, and one is also fecal coliform or E. coli positive.								
Total Coliform (% positive samples/month)	0	5	1.4	NA	NA	2006	No	Naturally present in the environment
Turbidity (NTU) 100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation.						2006	No	Soil runoff
The highest single measurement was 1. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	3.6	NA		2005	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	0.5	NA		2005	No	Erosion of natural deposits

UTILITIES DEPARTMENT
Water Quality Table 2006

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.11	2004	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0.0025	2004	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL or MRDL	Your Water	Violation	Typical Source
Inorganic Contaminants					
Mercury [Inorganic] (ppb)	2	2	ND	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland

UTILITIES DEPARTMENT
Water Quality Table 2006

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
positive samples	positive samples/yr: The number of positive samples taken that year
% positive samples/month	% positive samples/month: Percent of samples taken monthly that were positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

UTILITIES DEPARTMENT
Water Quality Table 2006

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

UTILITIES DEPARTMENT
Water Quality Table 2006

For More Information Please Contact:

City of Flagstaff – Utilities Department
John Davison, Program Assistant
211 W. Aspen Avenue
Flagstaff, Arizona
Phone: (928) 779 - 7685 x4838
Fax: (928) 556 - 1223
jdavison@ci.flagstaff.az.us
www.flagstaff.az.gov