

August 15, 2005

Ms. Kathleen Hartnett White, Chair
Mr. Ralph Marquez, Commissioner
Mr. Larry Soward, Commissioner
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Edwards Aquifer Protection Rules

Dear Chairman White and Commissioners,

This letter is in substitution for our earlier letter dated August 12, 2005. We signers of this letter represent an alliance of community organizations, environmental groups, planners, scientists, professional engineers, and elected representatives from across the Edwards Aquifer recharge and contributing watersheds. We are united in our demands that the Texas Commission on Environmental Quality (TCEQ) act immediately to implement a program to protect the Edwards Aquifer.

For more than 10 years TCEQ has ignored public requests for adequate Edwards Aquifer protection. Communities across the aquifer region have studied the scientific evidence of the threat of unchecked development to the quantity and quality of aquifer water and have responded by strengthening aquifer protections. Meanwhile TCEQ rules have remained stagnant and woefully inadequate.

Only TCEQ has authority to protect water quality across the entire Edwards Aquifer Region and beyond the regulatory jurisdiction of cities or individual aquifer authorities. While unmanaged development spreads unchecked across the Texas Hill Country, the consequences of TCEQ's failure are painfully evident. We watch as springs and wells run dry, or become contaminated with toxic metals, gasoline and other petroleum products, solvents, herbicides and pesticides.

Local experience as well as national and international scientific research on protecting sensitive water resources like the Edwards Aquifer clearly mandate certain minimum measures if the State of Texas and TCEQ are sincere in their commitment to protecting this aquifer. We demand that TCEQ's Edwards Aquifer protection program reflect sound science by incorporating, at a minimum, these provisions:

1. All development must be limited to no more than 10% impervious area within the Edwards Aquifer recharge zone.
2. All development must be limited to no more than 15% impervious area within the Edwards Aquifer contributing zone.
3. All development must preserve the soil and native vegetation within 300 feet of any known cave opening, karst solution features, springs, or wetland. The

- development must also preserve soil and native vegetation within 300 feet of a stream draining more than 100 acres.
4. The pollution reduction standard for storm runoff must be expanded beyond total suspended solids to reduce toxic metals, organic chemicals, and nutrients to safe or naturally occurring levels.
 5. TCEQ must implement a meaningful enforcement program, including:
 - Engineering review of all subdivision and site plans, construction phase erosion and sediment control plans, and permanent storm runoff management and treatment designs.
 - Regular and timely construction inspections.
 - Operating permit requirements and bi-annual maintenance inspections for engineered water quality controls.
 6. TCEQ must provide adequate funding for trained and experienced staff. Where local governments demonstrate equivalent or more protective standards and an adequate implementation and enforcement program, primary responsibility for implementing the TCEQ Edwards Aquifer protection program should be delegated. Delegation will reduce costs to both the applicant and the reviewing agencies by eliminating redundancies. TCEQ must, however, retain authority to require compliance with their rules where local jurisdictions fail to do so.

Please review the information we have included in the attachment to this letter and act immediately to provide these protections. Residents of the Texas Hill Country demand Edwards Aquifer protection so that it can continue to sustain our economy, the ecology, and the people of Central Texas for generations to come.

Sincerely,

Lauren Ross

Dr. Lauren Ross, Ph.D., P.E.
On behalf of Greater Edwards Aquifer Alliance

Aquifer Guardians in Urban Areas (AGUA)
1809 Blanco Road
San Antonio, Texas 78212

Austin Neighborhoods Council
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Austin, Texas 78767

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Christian Life Commission
Baptist General Convention of Texas
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Austin, Texas 78701

Bastrop County Environmental Network
P.O. Box 1069
Bastrop, Texas 78602

Bexar Audubon Society
P.O. Box 6084
San Antonio, Texas 78209

Clean Water Action
715 West 23rd Street
Austin, Texas 78705

Esperanza Peace & Justice Center
922 San Pedro Avenue
San Antonio, Texas 78212

Government Canyon Natural History Association
12861 Galm Road
San Antonio, Texas 78254

Guardians of Lick Creek
23058 Pedernales Canyon Trail
Spicewood, Texas 78669

Hamilton Pool Road Scenic Corridor Coalition
9600 Crumley Ranch Road
Austin, Texas 78738

Hays Community Action Network
14034 Robin's Run
Austin, Texas 78737-1243

Helotes Heritage Association
P.O. Box 1324
Helotes, Texas 78023

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Kendall County Well Owners Association
12 Brandt Road
Boerne, Texas 78006

Kinney County Ground Zero
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Brackettville, Texas 78832

La Fuerza Unida
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San Antonio, Texas 78211

Lake Medina Conservation Society
P.O. Box 390
Lakehills, Texas 78063

League of Women Voters of the San Antonio Area
1809 Blanco Road
San Antonio, Texas 78212

Medina County Environmental Action Association
Dr. Robert Fitzgerald, President
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Hondo, Texas 78861

Neighbors for Neighbors
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Elgin, Texas 78621

Northwest Interstate Coalition of Neighborhoods
11811 Burning Bend Drive
San Antonio, Texas 78249

Oblate School of Theology
285 Oblate Drive
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Pines and Prairies Land Trust
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Progressive Students' Organization of UTSA
c/o Student Leadership & Cultural Programs
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San Geronimo Watershed Alliance
Martha Leatherman, President
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Helotes, Texas 78023

Santuario Sisterfarm
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Save Barton Creek Association
P.O. Box 5923
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Save Our Springs Alliance
P.O. Box 684881
Austin, Texas 78701

Sierra Club, Lone Star Chapter
P.O. Box 1931
Austin, TX 78767

Sierra Club, Alamo Group
P.O. Box 6443
San Antonio, Texas 78209

Sierra Club, Austin Regional Group
54 Chicon Street
Austin, Texas 78702

Sisters of the Divine Providence
515 Southwest 24th Street
San Antonio, Texas 78207

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Smart Growth San Antonio
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San Antonio, Texas 78246

Texas Center for Policy Studies
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Texas Public Interest Research Group
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West Texas Springs Alliance
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Del Rio, Texas 78840

Wildside Education
Barbara L. Dugelby, Ph.D.
Executive Director and Conservation Scientist
Round River Conservation Studies
1268 Riverbend Drive
Blanco, Texas 78606

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City of Sunset Valley
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Sunset Valley, Texas 78745

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8438 Romney
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The Friendship Alliance, as a concerned coalition of Hays County Homeowners Associations and individual homeowners, is committed to the sustainable economic and natural health of the Hill Country. This commitment to its health is not only for our own benefit as residents, but for the benefit of the future generations who will reside here also. The absolute underpinning of this health for us, is a healthy Edwards Aquifer, which so happens to be degrading rapidly in its urban watersheds. Its clean, plentiful waters and our own economic well being are inextricably linked. Additionally, for the hundreds of thousands of us on Edwards wells, our actual physical health is at stake, not just our home values.

We agree with the GEAA in the importance and relevance of the science based requirements to protect the Edwards Aquifer and find their report not only telling, but supportive of our concerns. The evidence, both empirical and theoretical is in; our water supply is being both depleted and degraded and something must be done...now.

We would like to point out that a citizen and science based Regional Water Quality Protection Plan has been accepted by the relevant governmental subdivisions of Hays and Travis counties for the Barton segment of the Edwards Aquifer Recharge and Contributing Zones. We recommend the immediate adoption of the RWQPP measures in conjunction with and/or in place of the recommendations in the GEAA report depending on applicability to the area(s) in question. Like the Hill Country Alliance, we also would like to reinforce the importance of an adequate and stringent TCEQ enforcement program. The Friendship Alliance supports and applauds the GEAA's initiative in this endeavor.

Friendship Alliance
P.O. Box 225
Driftwood, Texas 78619

The Hill Country Alliance, an independent group of organizations and individuals committed to the sustainable health of the Hill Country, support the science in this letter. We agree with GEAA in the importance, relevance and immediacy of these measures to protect the Edwards Aquifer. Further, we recommend that TCEQ adopt the measures set forth in the Regional Water Quality Protection Plan in conjunction with GEAA's recommendations. While we recognize there is room for responsible planned growth in the Hill Country, it is time to direct growth away from the Hill Country's sensitive watersheds. We also would like to reinforce the importance of a stronger, adequately funded, TCEQ enforcement program and support all of GEAA's recommendations on this subject. We thank GEAA for their leadership on this issue.

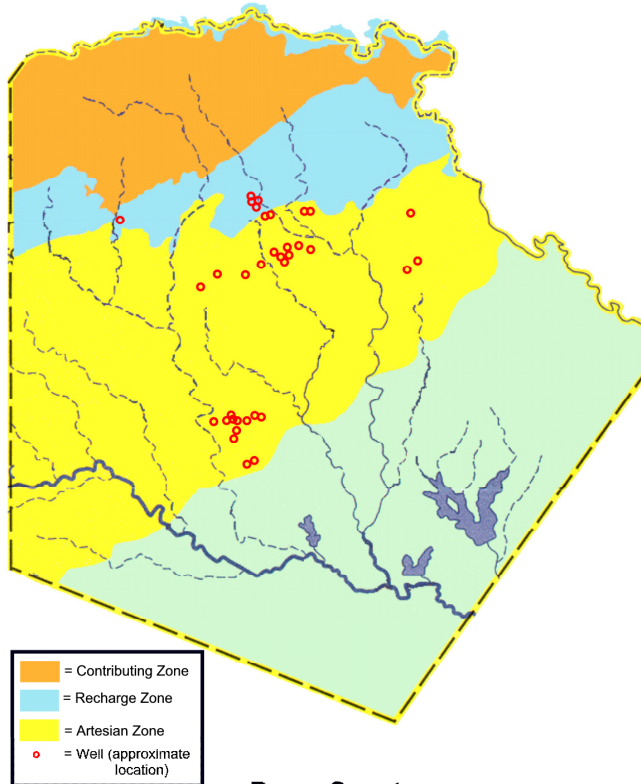
The Hill Country Alliance
3300 Crosswind Drive
Spicewood, Texas 7866

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Evidence of Contamination

Even though the Texas Commission on Environmental Quality has failed to conduct any adequate survey of water quality in the Edwards Aquifer, sample measurements by other entities from wells and springs flowing from the Edwards Aquifer provide clear evidence that water in the aquifer has been contaminated by human activities:

1. Chlorinated solvents¹ have been detected in several Bexar County wells in the Edwards Aquifer, at locations indicated on the map below.



**Bexar County
Public Supply Wells Found to
Contain Chlorinated Solvents
1982 - 1996**

Edwards Aquifer water supply wells have been shut in to protect drinking water supplies. In the San Antonio segment of the aquifer wells, these wells have been closed down because of toxic organic chemical contamination:²

- Castle Hill well owned by Bexar Metropolitan Water Supply;
- The Jones-Maltsberger well owned by the San Antonio Water System;
- The Bitters Road and Highway 281 well owned by Bexar Metropolitan Water Supply; and
- A city well in Uvalde.

In addition to these wells, which have been closed because of high concentrations of toxic organic chemicals, the San Antonio Water System operates a well on a reduced pumping schedule because of contamination; a private water supply well

¹ Trichloroethylene, tetrachloroethylene, 1, 2 dichloroethylene, 1,1,2,2 tetrachloroethane, vinyl chloride, dichlorobenzene, dichloroethane, chlorobenzene, trichloroethane, 1,1,1 trichloroethane, 1,1,2 trichloroethane, methylene chloride, dichloromethane. Source: George Rice, hydrologist, personal communication, March 2004.

² Geary Schindel, Edwards Aquifer Authority, personal communication, August 8, 2005.

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has been fitted with expensive activated carbon filtering devices to remove contamination, wells which exhibit nitrate concentrations above the drinking water standards. The San Antonio Water System closed the Braun Station well in 1984 because of a pathogenic outbreak of cryptosporidia.³

2. Diethyl phthalate at 120 ug/l was measured in the October 7 1981 sample from Barton Springs. This chemical is a plasticizer in polyvinyl chloride, an industrial solvent, a wetting agent, and a component of insecticides.⁴
3. Tetrachloroethylene (PCE) was measured in 7 of 10 samples collected from Barton Springs between February 1989 and February 1991. Tetrachloroethylene is a man-made compound. The source has never been identified.⁵
4. Wells in the City of Sunset Valley have experience significant problems with siltation and sediment. In July 1993, 1.5 feet of accumulated sediment were removed from the water storage tank, 8 months following the previous cleaning.⁶
5. Total suspended solids concentrations in wells as high as 18,000 mg/l have been reported in wells in the Barton Springs Edwards Aquifer along the Sunset Valley Fault.⁷
6. Samples from a well near the intersection of Barton Creek and Loop 360 were measured with concentration of lead from 20 to 40 ug/l and zinc from 100 to 260 ug/l⁸ Hauwert and Vickers⁹ reported the presence of lead in 14 and arsenic in 7 Barton Springs Edwards Aquifer wells. Samples from three wells exhibited arsenic concentrations higher than the drinking water standard of 0.01 mg/l.
7. Petroleum hydrocarbons have been measured in 12 wells and springs in the Barton Springs Zone. Total organic halogens have been measured in two wells.¹⁰ These chemicals are largely of human origin and rarely occur naturally in

³ Ibid.

⁴ Andrews, F. L., Schertz, T. L., Slade, R. M., and Rawson, Jack. *Effects of Storm-water Runoff on Water Quality of the Edwards Aquifer near Austin, Texas*. U. S. Geological Survey Water-Resources Investigation Report 84-4124, 1984.

⁵ Buszka, P. M. and R. M. Slade. Determination of the Sources of Organic Compounds in Ground-Water Discharges of Barton Springs, Austin, Texas. 10 April 1991.

⁶ Nico Hauwert, Geologist. Personal Communication, June 1994.

⁷ Hauwert, N. M. and S. Vickers. *Barton Springs/Edwards Aquifer Hydrogeology and Groundwater Quality*, prepared for the Texas Water development Board by the Barton Springs/Edwards Aquifer Conservation District, September, 1994.

⁸ Andrews, F. L., Schertz, T. L., Slade, R. M., and Rawson, Jack. *Effects of Storm-water Runoff on Water Quality of the Edwards Aquifer near Austin, Texas*. U. S. Geological Survey Water-Resources Investigation Report 84-4124, 1984.

⁹ Hauwert, N. M. and S. Vickers. *Barton Springs/Edwards Aquifer Hydrogeology and Groundwater Quality*, prepared for the Texas Water Development Board by the Barton Springs/Edwards Aquifer Conservation District, September, 1994.

¹⁰ Ibid.

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- groundwater. Their presence indicates degradation of the aquifer. Furthermore, the occurrence of these chemicals in some wells and springs is associated with elevated concentrations of pesticides, nitrate, lead, or arsenic, indicating contamination from a broad range of sources.
8. The City of Austin has documented statistically significant trends in the degradation of Barton Springs water for the following parameters: conductivity, dissolved oxygen, organic carbon, sulfate and turbidity.¹¹
 9. Other data has long been available and relied upon, for example, by Fish and Wildlife scientists. In one biological opinion¹² the scientists explained that

“Major highway, subdivision, and other construction projects along Barton Creek increased during the early 1980’s and 1990’s. While high turbidity has been observed in Barton Springs Pool following major storm events since the early 1980’s, the duration and frequency of sediment discharges from Barton Springs increased substantially during the 1990’s.”
 10. Sediments collected from Barton Springs on April 20, 1995 contained polycyclic aromatic hydrocarbons at levels up to 6.5 times those shown to be toxic to *Hyallela azteca*.¹³ Data in Tables 7-12 of the Biological Opinion show exceedances of EPA probable effects levels (i.e. effects to aquatic organisms) for twenty different metals, pesticides and poly-aromatic hydrocarbons occurring at Barton Springs Pool and Barton Creek.
 11. Atrazine has been detected in Barton Creek and Barton Springs Pool. A study by the United States Geological Survey (2000) showed atrazine in the pool after a rain. Peak detected levels were 0.56 ug/l in Barton Springs, 0.80 ug/l in Williamson Creek, and 0.44 ug/l in Barton Creek. One year later, in May of 2001, the USGS again sampled soluble pesticides in Barton Springs and Barton Creek following a rain. This time, USGS detected a peak concentration of 3.19 ug/l atrazine at Upper Barton Springs. The Texas State drinking water standard for atrazine is 3 ug/l.

Evidence Demonstrating the Need to Limit Imperviousness

Impervious areas include rooftops, sidewalks, concrete-lined drainage channels, parking lots, residential streets, and roadways—any man-made feature that prevents water from going directly into the soil. The effect of imperviousness on stream degradation has been widely researched and well-documented:

¹¹ City of Austin, *Update of Barton Springs Water Quality Data Analysis – Austin, Texas*, February 2005.

¹² 62 Fed. Reg. 23385.

¹³ City of Austin, unpublished data, 1994; Ingersoll et al., in press.

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“. . . Scientific evidence . . . relates imperviousness to specific changes in the hydrology, habitat structure, water quality and biodiversity of aquatic systems. This research, conducted in many geographic areas, concentrating on many different variables, and employing widely different methods, has yielded a surprisingly similar conclusion: stream degradations occurs at relatively low levels of imperviousness (~10%). Most importantly, imperviousness is one of the few variables that can be explicitly quantified, managed and controlled at each stage of land development.”¹⁴

In 1997 thirty-nine scientists, planners, and engineers in the Edwards Aquifer region produced and signed *Protecting the Edwards Aquifer: A Scientific Consensus*.¹⁵ The consensus of virtually every independent scientist familiar with the Edwards Aquifer was that it is not feasible to prevent aquifer contamination without limiting the amount of impervious cover in both the recharge and contributing zones. Furthermore, these scientists specifically agreed that engineered controls, even when perfectly maintained, cannot replace impervious area limits.

This conclusion has been recently reaffirmed in *Regional Water Quality Protection Plan for the Barton Springs Segment of the Edwards Aquifer and Its Contributing Zone*.¹⁶

“Based on the evaluations of the scientific studies presented, the consulting team determined that the approximate quantity of impervious cover which can occur while remaining protective of water quality in the Planning Region is in the range of ten to fifteen percent (10% to 15%), on a gross site area basis.”

The USGS documented the relationship between urbanization and water quality degradation in streams throughout the Austin area. Nine of the 18 study sites were along streams in the Barton Springs segment and its contributing zone. The study demonstrated statistically significant increases in constituent concentrations with increasing impervious cover.¹⁷

a) Storm Runoff Pollution

With higher impervious cover, more pollutants are generated and carried into storm runoff. Figure 1 shows estimated pollution increases in storm runoff as impervious cover increases due to development. These relationships are based on data from storm runoff monitoring in Central Texas and are consistent with results from many similar studies around the United States. The figures show that with even modest levels of imperviousness, pollutant loads increase by 5 to 12 times that of an undeveloped site.

¹⁴ Schuler, Thomas. *The Importance of Imperviousness*, Watershed Protection Techniques, 1(3): 100-111.

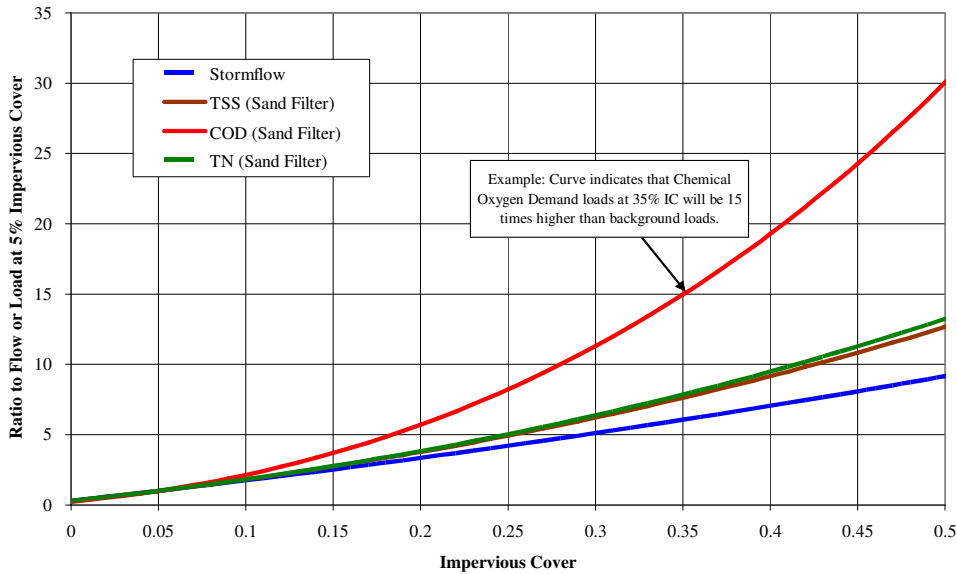
¹⁵ A copy of this document and a list of the signers are attached.

¹⁶ June, 2005. <http://www.waterqualityplan.org/index.php?BODY=finaldraft>.

¹⁷ Veenhuis, J.E., and Slade, R.M., 1990, *Relation Between Urbanization and Water Quality of Streams in the Austin Area, Texas*, USGS Water Resources Investigations Report 90-4107.

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Figure 1. Increasing Stormflow and Pollutant Loads with Increasing Impervious Cover

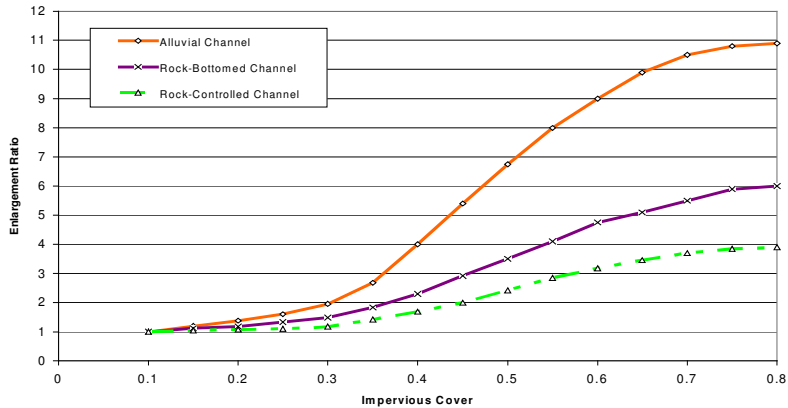


b) Stream Bank Erosion

With larger impervious areas, more water reaches waterways faster and with greater erosive force. The resulting scour widens and deepens channels, abrades aquatic and streamside vegetation, and creates shifting sediment bars. An estimated 80% of the total suspended solids pollution generated from urbanization comes from channel banks downstream from the developed watershed. Engineered water quality controls treating runoff from a developed area do nothing to remove this additional sediment pollution.

Sediments and adsorbed pollutants introduced by this runoff suffocate and contaminate stream ecosystems, and eliminate the natural pool and riffle sequences critical to fish and wildlife. Enlarging channels destroy tree root support and eventually these large trees fall and die. Figure 2 illustrates the effect of impervious cover on the size of stream channels.

Figure 2. Stream Enlargement Ratio versus Impervious Cover



Source: Raymond Chan & Associates, *Technical Procedures for the Watershed Erosion Assessments*, September, 1997.

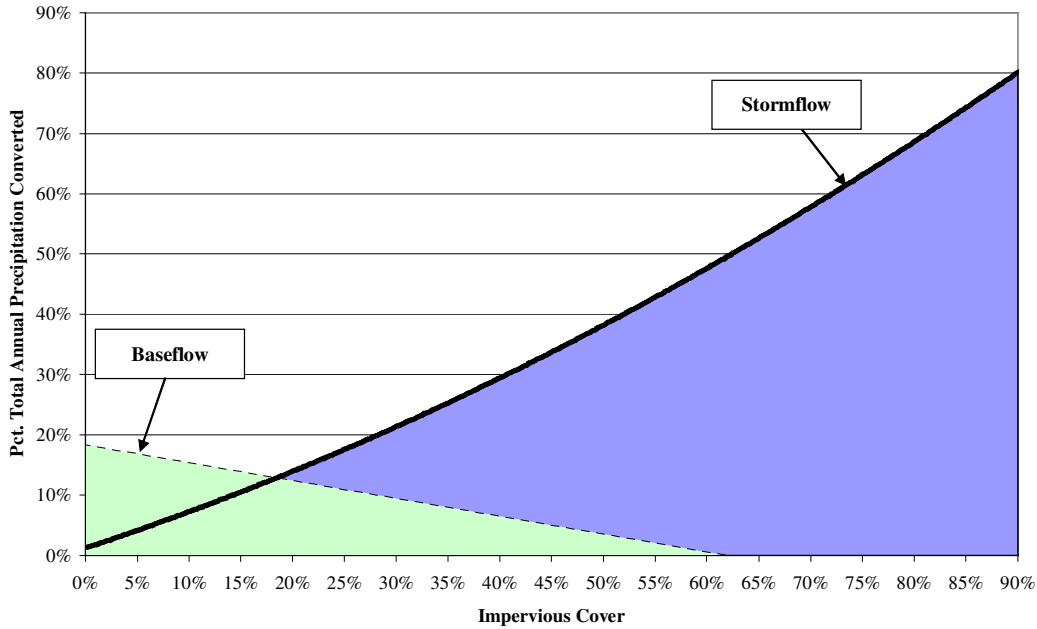
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c) Decreased Base Flow in Streams Decreases Aquifer Recharge

Baseflow is defined as water in creeks and rivers between storm runoff events. It provides most of the Edwards Aquifer recharge in the Barton Springs Zone and likely in the San Antonio Edwards as well. Baseflow loss translates directly, therefore, into a reduction in available aquifer water. The loss of baseflow also radically alters the natural character of the stream and eliminates the viability of wetlands and aquatic habitat.

Figure 3 shows how baseflow drops and storm runoff increases as imperviousness increases. Impervious surfaces covering about 30% of a site reduce baseflow volumes by one half. At 60% imperviousness, virtually 100% of the baseflow is eliminated. Even if we were to eliminate 100% of the pollutant loads in storm runoff, development still diminishes baseflow volumes, which in turn diminishes the amount of aquifer water available.

**Figure 3. Percent of Precipitation Converted to Stormflow and Baseflow
versus Impervious Cover**



Developers and their engineers have consistently argued that impervious cover limits are unnecessary because engineer water quality controls can protect the Aquifer. This perspective is reflected in the existing TCEQ Edwards Aquifer protection regulations which require some water quality treatment but do nothing to limit imperviousness.

This perspective, however, fails to recognize the clear scientific information and experience that engineered systems cannot replace the water quality benefits of undeveloped land, open space, park areas, and low impervious cover development for two significant reasons.

One reason is that the treatment systems required by TCEQ do not address all of the water quality problems that are generated by development. These systems do not, for

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example, eliminate the sediment load created by increased stream bank erosion downstream from the control. These systems also do not replace clear and clean base flow in the streams between the storm runoff events, which provides most of the aquifer recharge.

The second reason that these treatment systems do not eliminate the need for impervious cover restrictions is that they degrade and fail. Where the natural landscape that remains on a low-imperviousness development remains day after day and year after year to provide high-quality and sustaining aquifer recharge, engineered systems fail routinely. Many of the engineering designs are based on faulty assumptions. They are often not constructed to the engineered specifications. Once constructed, they are rarely maintained. A survey of constructed engineered systems built to comply with the existing TCEQ Edwards rules would demonstrate inadequacies in the vast majority.

The Need for Preserving Natural Soil and Vegetation Surrounding Known Cave Openings, Solution Features, Springs, Wetlands, and Streams.

Buffers serve three important functions to protect Edwards Aquifer recharge:

1. Buffers separate development and associated pollution from entry-ways into the aquifer. This physical separation improves the likelihood that entry-ways into the aquifer will remain open and continue to provide aquifer recharge. This physical separation also provides a safety zone in which to capture and contain hazardous spills and accidental releases of toxic chemicals.
2. Buffers filter runoff, removing sediment, nutrients, pesticides, heavy metals, or toxic organic chemicals before water enters the aquifer where these filtering processes do not occur.
3. Buffers provide an area where runoff can soak into the soil and migrate to karst openings within the aquifer.

Evidence Regarding Inadequacy of TCEQ Storm Runoff Pollution Reduction Standards

Allen White, a U. S. Fish and Wildlife contaminants expert, offered these comments on the TCEQ storm runoff pollution reduction standard requiring removal of only 80% of the increase in total suspended solids (TSS):

“Emphasis on TSS removal is based on the assumption that TSS is an adequate surrogate for all other contaminants of concern that may be in run-off from all land uses covered by this document/initiative. TSS may not be an adequate surrogate for certain toxic pollutants of concern (soluble pesticides, nutrients or heavy metals).”¹⁸

¹⁸ Email from Robert Pine to Michael Barrett (January 31, 2005), provided by U. S. Fish and Wildlife Service to SOS Alliance pursuant to Freedom of Information Act request.

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Even with the TCEQ-required reduction in total suspended solids, other chemicals remain in urban storm runoff at higher than natural levels. These elevated chemical concentrations are damaging to human health and to the diversity of species in the natural world.

Evidence Regarding Inadequate Enforcement of Existing TCEQ Edwards Protections

A fundamental flaw of the Edwards Rules is that they depend on self-reporting, rather than relying on independent review by TCEQ. On the rare occasion when independent scrutiny is brought to bear on the regulatory process, noncompliance is revealed.

For example, in November of 2003, Cunningham-Allen, Inc. submitted a Water Pollution Abatement Plan (WPAP) to TCEQ for the construction of a Lowe's Home Improvement Warehouse in the recharge zone, along the border between the City of Austin and City of Sunset Valley. The document contained the seal and signature of professional engineer Elias G. Haddad. Within the WPAP was a Geologic Assessment signed by David Hill, P.E. and John E. Cook from Professional Service Industries, Inc. The report said the following:

"The purpose of this report is to . . . identify the location and extent of significant recharge features present in the development area.

The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration.

[F]ield observations indicate that no obvious recharge features are onsite.

The . . . lack of recharge features onsite

No recharge features were found on the subject site.

No recharge features were found onsite.

No recharge features were found on the subject site."

Based on this submission, Executive Director Margaret Hoffman issued a letter approving the WPAP on February 18, 2004 containing the following language:

"According to the geologic assessment included with the application, no geologic features exist on the site. . . [B]ased on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved"

However, in subsequent litigation, when an independent engineer was able to obtain entry to the site during construction, she observed and photographed an obvious recharge feature through which virtually 100% of storm runoff was draining from most of the site. Water on the site contained an oil-product spilled from an onsite fuel storage tank as well as high levels of sediment and nitrogen—all being delivered directly into the Aquifer.

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Before the court, Lowe's disputed the existence of this now photographed and documented recharge feature. But the court issued a temporary injunction, ordering Lowe's to divert storm water runoff "from flowing into aquifer recharge features[,] remove fuel tanks [and] remove . . . water contaminated by hydrocarbons"

Similarly, when SOS Alliance filed suit to challenge a development along Little Barton Creek in the Village of Bee Cave, SOS Alliance site visits pursuant to the litigation revealed numerous violations of the TCEQ WPAP requirements. As a result the developer was penalized by TCEQ, something that was unlikely to have occurred if the violations had not been independently investigated by SOS Alliance.

Evidence Regarding Inadequate Funding of TCEQ Edwards Protection Program

TCEQ regulations apply to the Edwards Aquifer recharge and contributing zones in all or portions of Medina, Bexar, Comal, Kinney, Uvalde, Hays, Travis and Williamson Counties. The total area to which they apply is more than 3,500 square miles. More than 200 Water Pollution Abatement Plan applications in each of the last several years have been submitted to the San Antonio district office for review.

Implementation of the Edwards protection program is the responsibility of TCEQ district offices in Austin and San Antonio. Total TCEQ expenditures to protect the entire Edwards Aquifer region were \$585,058 in 2004. By comparison, the expenditures of the City of Austin watershed protection department, covering a much smaller portion of Texas, amount to more than \$5 million per year.