ENVIROCAST®: INCREASING NONPOINT SOURCE POLLUTION PREVENTION THROUGH WATERSHED AWARENESS IN THE UPPER TRINITY RIVER WATERSHED

PROJECT #01-19
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FINAL REPORT

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NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
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EXECUTIVE SUMMARY

The Envirocast® project, branded as e-Life, or Environmental Quality of Life, was an innovative project that sought to increase awareness about local environmental issues and to promote individual, voluntary measures that the public can take to protect watershed resources in North Central Texas. In order to help North Central Texans better understand the factors that influence their environmental quality of life, the e-Life project, in a partnership with the Texas State Soil and Water Conservation Board, U.S. Environmental Protection Agency- Region 6, North Central Texas Council of Governments, CBS/KTVT-11, and StormCenter Communications, Inc., featured two main elements. One component consisted of on-air broadcasting of environmental tips and stories, and the other was a specialized web site about the Upper Trinity River Watershed where visitors were able to learn more about their local environment.

The e-Life project was modeled after Washington D.C.'s Envirocast®, which was designed to raise awareness of the Chesapeake Bay Watershed. Like Envirocast® and other similar projects across the nation, e-Life employed local television weather reports as a means to raise the environmental awareness of the region's residents. Research shows that weather is the top reason 80 percent of Americans watch local news. In addition, for most Americans, the weather report is their only consistent exposure to science in any form.

The broadcasting and on-line components of the e-Life project had the potential to provide watershed information to nearly 2.3 million television viewing households in 31 counties and brought 101,557 visitors to the project website. Since the e-Life project began in March 2006, 283 on-air stories ran a total of 362 times and 77 on-line stories and at least 20 different educational features were posted to the project website. While a systemic change in the public's attitude and behavior as a result of this project to protect watershed resources in North Central Texas is difficult to measure, e-Life has nevertheless had a positive effect on the region's environmental awareness and quality.

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INTRODUCTION

The project "Envirocast®: Increasing Nonpoint Source Pollution Prevention through Watershed Awareness in the Upper Trinity River Watershed" introduced local-level environmental news and information. This news and information was specifically designed to raise citizen's understanding, appreciation, and treatment of environmental issues at the watershed scale. The project made environmental science accessible to a significantly larger audience than any previous education program in the North Central Texas region and the Upper Trinity River Watershed.

The principal goal of this project was to improve water quality in the Upper Trinity River Watershed. The strategy used to achieve this goal was initiation of a local public education process that would dramatically increase awareness about local environmental conditions and to promote individual, voluntary measures that the public can take to prevent nonpoint source (NPS) pollution. This effort was designed to catalyze systemic change in the attitude and behavior of citizens by exposing them to a mix of media in which environmental science and meteorological expertise were packaged together, enhancing viewer receptivity to the environmental messages. This project therefore expanded the role of local TV weather reporting, allowing weather reports to serve also as a recognized source for local environmental information and providing an increased audience for environmental education.

The Upper Trinity River Watershed encompasses the largest population center in Texas (Figure 2). The media is the most effective method reaching a significant population; however, in such a large media market it has been cost prohibitive for local public entities to conduct extensive media outreach capable of effectively reaching the North Central Texas public. More affordable media outreach efforts have been necessarily limited in scope. According to Nielsen Media Research, the Dallas-Fort Worth region is the 7th largest TV Designated Market Area (DMA) (Figure 1) in the nation with the potential to provide NPS pollution prevention information to nearly 2.3 million TV viewing households in 31 DMA counties.

Figure 1: KTVT Designated Market Area (DMA) coverage by county.

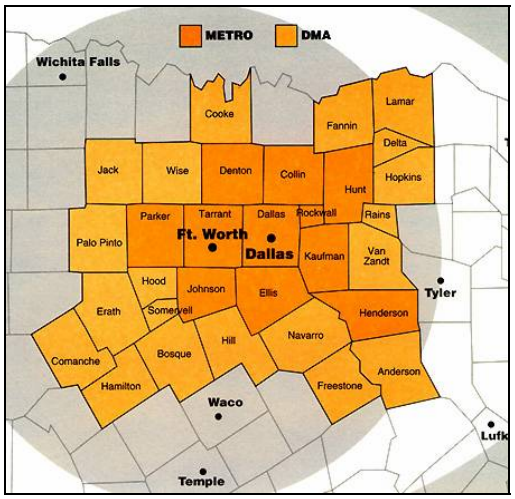
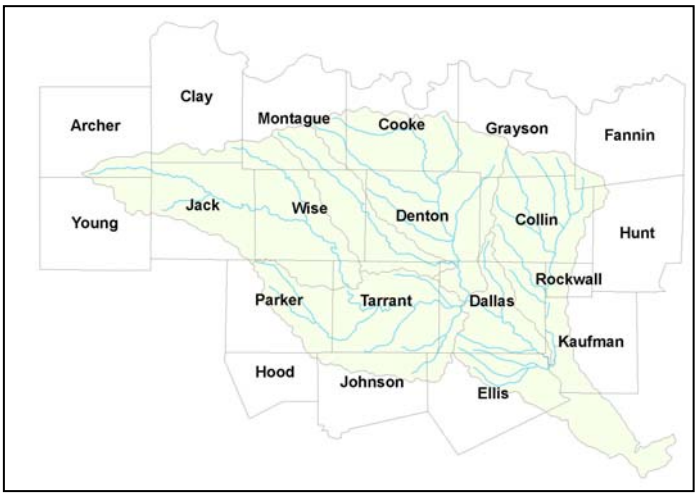


Figure 2: Map of the Upper Trinity River Basin boundary shown by counties.



The e-Life project was able to take advantage of this market and drive key messages on a consistent basis via the daily weathercast—the number one reason people watch local news. People are in a learning mode when they tune in to get the weather report which provided a great opportunity to tie the weather report with environmental learning to reach an already captive audience. Key environmental messages were also presented as part of the newscast. The weathercast and newscast were also connected to a project website, where more in-depth

watershed and NPS information was provided.. This project provided the distribution and communication mechanism necessary to get environmental science information to the public effectively and efficiently.

Increasing population growth in the North Central Texas region will continue to impact Texas' natural resources, particularly the quality of water resources. This broad-based effort addressed both urban and rural causes and sources of NPS pollution, presented information on other environmental issues, and provided an unprecedented depth to critical education in the Upper Trinity River Watershed. The North Central Texas Council of Governments (NCTCOG) worked with StormCenter Communications, Inc., a Dallas-Fort Worth TV station (KTVT CBS-11), and an extensive network of local stakeholders to conduct this project.

RESULTS

NCTCOG entered into two one-year contracts with StormCenter Communications, Inc. from March 2006 to March 2007 and March 2007 to April 2008 to carry out the tasks outlined in the contracts. For the past two years, NCTCOG has been overseeing and coordinating the work performed under these contracts and work scopes.

The two main elements of the e-Life project consisted of on-air broadcasting of environmental tips and stories, and a specialized web site about the Upper Trinity River watersheds where visitors were able to learn more about their local environment. The on-air and on-line components of the e-Life project were deemed the most efficient and effective ways to disseminate environmental science information to the public to equip them with the proper knowledge needed to protect our water resources and our overall environment. The tasks carried out from March 2006 to April 2008 supported these project components.

On-Line Component

The e-Life website debuted on April 20, 2006. The project website consisted of 6 major sections: “Home”, “Our Watersheds”, “Learning Center”, “Resources”, “Media”, and “Environmental News”. The design of the website was organized by StormCenter, and the content for each section was developed by StormCenter, the Local Content Providers Network (LCPN), and/or CBS/KTVT-11. Additional features designed to educate the public on specific aspects of the environment, particularly water resources, are included under the major sections of the project website.

Home

The “Home” page of the e-Life project website (Appendix A) resembled the format of the other Envirocast® markets’ home page; however, each Envirocast® home page is unique to the market area. In this case, the graphics, visual aids, and links as showcased on the “Home” page were almost entirely unique to the Upper Trinity River Watershed. The “Home” page also featured e-Life’s newest features as they were developed throughout the project cycle, including the most-recent on-line and on-air environmental news stories (ENS), and other popular features. Promotional and informational videos from CBS/KTVT-11 meteorologists introducing the e-Life initiative were also included on this page.

Our Watersheds

The “Our Watersheds” page (Appendix B) introduced the term “watershed” by describing the Upper Trinity River Watershed. Additional watershed-related educational features, where viewers could go to learn more, were provided on this page.

About the Upper Trinity River Watershed

The “About the Upper Trinity River Watershed” (Appendix C) page provided information on the Trinity River, main branches of the Upper Trinity, water quality, topography, and climate and geography.

Find Your Local Watershed

The “Find Your Local Watershed” page (Appendix D) consisted of an interactive feature that allowed the public to type in their zip code to find the watershed that they live in. The boundaries of the individual sub-watersheds across the North Texas region were outlined in the following maps: state boundary map, satellite image map, Digital Elevation Model (DEM) map, and forest density map. Boundaries of a total of 20 sub-watersheds were provided in these maps.

Detailed information was included for 10 of these 20 sub-watersheds (Appendix E). The following information was provided: counties, main water bodies, watershed health, how you can help protect your watershed, fun things to do in this watershed, and local resources. These 10 sub-watersheds are part of the Upper Trinity River Watershed. For the remaining 10 sub-watersheds not part of the Upper Trinity River Watershed, a link outside of the project website to learn more about that particular sub-watershed was provided (Appendix F).

Real-Time Information

The following real-time information was provided for several locations throughout the North Central Texas region and/or the Trinity River basin: graphical warnings (i.e. tornado, thunderstorm, etc.), stream flow, river/stream flow gauges, and rainfall, lake, and river level data. See Appendix G, H, I, J, and K for the real-time information web pages.

Calendar of Events

The “Calendar of Events” page (Appendix L) allowed for the public to view any upcoming environmental events taking place across the North Texas region. Communities within the Upper Trinity River Watershed were also able to submit their events for consideration to be added to the “Calendar of Events” page. Members of the LCPN and other community groups submitted a total of approximately 355 environmental outreach events that occurred throughout the project period for posting to the “Calendar of Events”.

Links to Local Organizations

In order for the public to learn more about organizations in the Upper Trinity River Watershed, a list of local organizations as well as a link to their websites was provided (Appendix M) on the project website.

Regional Watersheds

A map of watersheds across the U.S. was provided on the “Regional Watersheds” page (Appendix N). When clicking on a specific watershed, a new page is accessed that provided the following information on that particular watershed: geographic features, about the watershed, key issues, useful links, and regional and local watershed organizations (Appendix O).

Learning Center

The “Learning Center” page (Appendix P) contained interactive features that were not necessarily unique to the Upper Trinity River Watershed, but that were fun, informative and provided general information on watersheds, forests, and coasts. The e-Life LCPN also created a new feature that was unique to the Upper Trinity River Watershed. This feature provided information on recreation and the outdoors to highlight the impacts of water quality impairments on recreational uses in the watershed. StormCenter turned this content into a visually appealing interactive graphic similar to the watersheds, forests, and coasts features. See Attachment A to view these graphics. Note that Attachment A exists in a CD format due to the large file size.

Resources

The “Resources” page (Appendix Q) was designed to provide the public with additional information related to the topics below.

Local Resources

The “Local Resources” page (Appendix R) provided 66 links where the public could go for more information about Upper Trinity River Watershed topics including: information especially for

children and youth, air quality, area lakes, creeks and watersheds, landscaping resources, natural resource conservation, recycling and household hazardous waste management, storm water, outdoor learning, water conservation, and weather.

Web Links

Links to 45 national and regional environmental programs targeting adults and children (the majority of which programs provided information on water) were included on the “Web Links” page of the project website (Appendix S).

Organizations

The “Organizations” page (Appendix T) provided a list and links to 33 national watershed organizations.

Brochures

15 educational brochures were listed on and accessible from the “Brochures” page (Appendix U). These focused on water quality, water conservation, watershed protection, groundwater, climate change, and coastal area resources.

Watershed Tips

The “Watershed Tips” page (Appendix V) provided a list of 45 resources and links with information on what the public can do at home, in the garden, at work, and while on vacation to protect their local watershed.

SmartScape® Tips

A list of 14 facts was provided on the “SmartScape® Tips” page (Appendix W) to inform the public about the environmental, aesthetic, and economic advantages of using native and adapted plants in residential landscapes. Texas SmartScape® is a program that encourages the use of these plants because they require less water, pesticides, fertilizers, and herbicides, and therefore protect water resources.

Forest Facts

The “Forest Facts” page (Appendix X) provided 31 pieces of information on the importance of trees and forests as related to air quality, recreation, storm water management, and other environmental benefits.

Coastal Facts

A list of 16 facts was provided on the “Coastal Facts” page (Appendix Y). The facts touched on the biological importance of coastal areas as well as the effect of impervious surfaces and NPS pollution in threatening our coastal waterways.

Glossary

The “Glossary” page (Appendix Z) consisted of 6 links to federal, state, and/or non-profit sites that provide definitions of terms often seen in environmental applications.

Recreation

The “Recreation” page was the most recent addition to the project website. These pages were linked to the recreation feature on the “Learning Center” page. The main page (Appendix AA)

offered a definition of storm water pollution, explained its importance, and listed some of the common sources of water pollution. For each of the 7 common sources of water pollution, the following information was provided: an interesting fact, origins of the source/problem, a description of the problem, how the problem affects recreational activities, and what the public can do to help prevent this nonpoint source of pollution from entering our waterways. See Appendix AB, AC, AD, AE, AF, AG, and AH for the web pages that described the following common sources of storm water pollution and their effects on water and recreation activities: dirt/sediment, litter, motor oil/fuel, detergent, pet/people waste, fertilizers/pesticides, and grass clippings/leaves.

Media

See the On-Air Component for more detailed information. The on-air ENS that were broadcast on CBS/KTVT-11 were also uploaded to the project website and were placed under one or more of the following 10 different categories depending on their subject: Public Action, Wildlife Features, Energy Alternatives, Atmospheric Conditions, Land Features, Watershed Features, Eye on the Environment, Watershed Series, Extended Interviews, and Exclusive News—displayed on the "Media" page (Appendix AI). See Appendix AJ, AK, AL, AM, AN, AO, AP, AQ, AR, and AS for the respective category pages.

Additional media features were developed and launched on the project website as part of the "Watershed Features", including two computerized flyovers of the West Fork and Elm Fork watersheds. A flyover of the U.S. regional watersheds was also uploaded to the project website. The watershed boundaries were outlined and water bodies such as lakes and rivers were identified in the local watersheds. See Attachment B to view the West Fork and Elm Fork flyovers.

Environmental News

The content for on-line environmental news stories (ENS) was developed primarily by the LCPN—a group made up of 62 stakeholders representing 35 entities in the North Central Texas region (Appendix AT). Over the past two years, the LCPN developed 120 story ideas for submission as either on-line and/or on-air ENS. These ideas were either submitted to NCTCOG via email or a list was generated (Appendix AU) at each of the 8 LCPN meetings held throughout the project period. See Attachment C for LCPN meeting summaries.

A total of 77 ENS (Appendix AV and AW) were posted on the project website covering a variety of topics. The majority (~64%) of these stories focused on water quality and offered steps the public can take to reduce NPS pollution to protect our water resources. The remaining on-line ENS covered topics such as air pollution, solid waste, land management, wildlife, and energy efficiency. 24 of the 77 on-line ENS are included in pdf format in Attachment D. These 24 stories represent the variety of topics covered in the on-line ENS.

On-Air Component

The first e-Life on-air ENS was broadcast on April 20, 2006. Since the on-air debut, a total of 283 e-Life related stories were produced and aired on CBS/KTVT-11. Five of these stories were part of the "Watershed Series" (Appendix AX), seven were part of the "Eye on the Environment Series" (Appendix AY), and the remaining 271 (Appendix AZ) were developed as part of the on-going on-air component of e-Life. Content for the on-air ENS was generated by CBS/KTVT-11, StormCenter, and the LCPN.

Environmental News Stories

Content generation for the on-going on-air component of e-Life was a collaborative effort primarily among StormCenter and CBS/KTVT-11. The LCPN also provided some story ideas to CBS/KTVT-11 via emails from NCTCOG. The 271 on-air ENS covered a variety of topics as listed

under the Media section on page 10. 82 of these stories were considered to be Watershed Features that provided the public with the information and resources necessary to have a better understanding of their local watershed. The on-air ENS were broadcast as part of the newscast in the morning, afternoon, evening, and/or nightly news and viewers were directed to the project website to learn more about the Upper Trinity River Watershed. The majority of these stories were broadcast in the evening news. See Attachment E to view a handful of these vignettes.

Watershed Series

A 5-part “Watershed Series” was developed to educate the public on the Upper Trinity River Watershed, with each of the five segments airing adjacent to the weather forecast. Part 1 defined the term “watershed” and addressed NPS pollution. Parts 2 and 3 focused on two common sources of water pollution—lawn care products and litter. Parts 4 and 5 addressed the impacts of water pollution on drinking water sources and the importance of water conservation. Tips on how the public can do their part to protect local watersheds were also presented and viewers were directed to the project website to learn more. See Attachment F to view all 5 parts of the “Watershed Series”.

Eye on the Environment Series

The “Eye on the Environment Series” consisted of seven educational vignettes that were aired adjacent to the weather forecast a total of 86 times from May 2007 to April 2008. The first two vignettes focused on water pollution and smart growth; the 3rd, 4th, and 5th vignettes focused on air quality and transportation, and the final two focused on recycling. All seven vignettes addressed different aspects of the environment that impact quality of life. Each vignette offered tips viewers could apply to their daily lives and directed viewers to the e-Life project website for more information. See Attachment G to view all seven parts of the “Eye on the Environment Series”.

Project Promotion

The e-Life project was promoted and publicized by NCTCOG, StormCenter, and/or CBS/KTVT-11 to stakeholders and North Central Texas residents through approximately 27 one-time or on-going features, items, or activities. For a complete listing, see Appendix BA. The LCPN also promoted e-Life through a variety of means, such as school presentations, web site links to the project web page, word of mouth, special events, etc.

DISCUSSION

The e-Life project has equipped the public with the information necessary to help protect watershed resources in North Central Texas. The on-line and on-air components of the project introduced environmental news and information to the public through two very important distribution avenues to raise citizen's understanding, appreciation, and treatment of environmental issues at the watershed scale.

On-line and On-air ENS Relationships

Since the on-line and on-air components of the project debuted on April 20, 2006 at least 101,557 (Appendix BB) people visited the project website and at least 80,720 (Appendix BC) people tuned in to watch the evening news on CBS/KTVT-11. This coupling of on-line and on-air ENS and information was a successful piece of the project that drove viewers to the project website to access more information. For Phase I and Phase II, daily website statistics showed that there was more activity on the project website on days when CBS/KTVT-11 aired an ENS. On days when an ENS was aired, the average number of page loads and unique visitors to the project website was higher than on days when an ENS was not aired (162.19 and 76.70 versus 122.15 and 61.42, respectively) as indicated in Appendix BD, BE, and BF. The e-Life project is referred to in the airing of an ENS by mention from the meteorologist or newscaster or by a banner that appears on the screen. This reference to the e-Life project appears to have motivated CBS/KTVT-11 viewers to visit the e-Life website the same day of the airing to learn more.

On-line Component

The on-line component of the e-Life project provided watershed and other environmental information designed for residents of North Central Texas and the Upper Trinity River Watershed. The e-Life website offered high quality, educational information and tips the public could apply to their daily lives. Approximately 101,557 people visited the e-Life website throughout the life of the project. StormCenter currently manages 11 Envirocast® markets and the Dallas-Fort Worth e-Life site ranked 3rd among these markets for the number of website page loads.

According to Appendix BB, website visitors were, on average, viewing approximately 2 pages per visit. About 1 in 9 visitors were returning while 8 in 9 were first time visitors. This indicates that more people are familiar with the e-Life project, but are not taking advantage of the resources the website has to offer.

Not all visitors to the project website live in the North Central Texas region. However, website analytics were not able to identify the specific location of the website visitors. The assumption that some visitors are outside the region may help explain why visitors are only viewing, on average, approximately 2 pages per visit. Internet surfers from around the U.S. may be brought to the e-Life project website through a search engine, but if they are not located in the DFW area or the Upper Trinity River Watershed they may not feel inclined to explore the website.

LCPN members, StormCenter, NCTCOG, and CBS/KTVT-11 staff were responsible for a portion of the website page load statistics. These project partners, particularly StormCenter and NCTCOG, visited the website on a consistent basis for website maintenance purposes or to locate information for reporting purposes. For instance, NCTCOG staff visited the website more regularly and viewed more pages in one visit from January to February 2008 in order to prepare for the final reports. This may be one reason for an increase in the number of returning visitors and page loads in February 2008.

On-air Component

The on-air component of the e-Life project offered a visual, clear way to showcase newsworthy environmental initiatives and events that may not have otherwise been publicized. The majority of

on-air ENS were broadcast during the CBS/KTVT-11 weekday evening news, and according to Nielson Media Research (Appendix BC), an average of at least 80,720 people tuned in to view the 4 p.m., 5 p.m., and 6 p.m. weekday newscasts throughout the project period. The Dallas-Fort Worth Envirocast® market ranked 2nd out of the 11 markets managed by StormCenter for the production of on-air ENS.

This avenue of watershed and environmental education reached a more diverse and broader audience than the on-line component. Assuming that these 80,720 viewers caught the ENS, CBS/KTVT-11 was successful at educating the general public about local environmental issues, in order to promote individual, voluntary measures that the public can take to protect resources in North Central Texas.

Viewers of news programming come from various backgrounds; therefore, not all were aware of the factors that influence their environmental quality of life. When tuning in to get local weather and news reports, they are in a learning mode. This provided a great opportunity to reach an already captive audience by running environmental messages on a consistent basis adjacent to the weather and news reports. There is no evidence that these environmental message increased watershed awareness and favorable attitudes, but the more the viewers were exposed to these messages the more likely they were to have a positive impact.

Many members of the LCPN thought that broadcasting environmental news was the most efficient and effective method of reaching a significant population. At the start of this project it was the only effort in the North Central Texas region to take advantage of this type of branded environmental information dissemination. As of March 2008, three other major news stations in the region have developed their own versions of e-Life. This is evidence that the e-Life project has had a profound effect in the region.

Community Impact

Several entities across the North Central Texas region have indicated that the e-Life project has had a positive impact on their community. Most evidence of the influence has come from the project website; although, the on-air feature seems to have served as a catalyst for increasing environmental news coverage across the region. Citizens are using the e-Life website as a tool to learn more about environmental issues. For instance, teachers and students in the Garland Independent School District (GISD) have used the information provided to assist with students' school projects. The City of Lewisville staff also introduced the e-Life project website to the Lewisville Independent School District (LISD) as an aid for the Major Rivers Education Program for Texas 4th graders. The website not only targeted adults, but there were several features such as the "Learning Center" interactive graphics that children could easily relate to and appreciate.

Targeting children and using them to spread environmental information is a great way for parents to learn about the environment and to take steps necessary to protect the earth's resources. Many parents are in tune with what their child is learning at school or in informal education programs, and conversations about what he/she learned that day offers a means for information exchange. Often times it is the student who encourages the parents to take action; whether it be to recycle, turn off the lights/water when not in use, or to use less pesticide/fertilizer on the yard. Because children can have a huge impact on their parents' attitudes and behaviors when it comes to the environment, using teachers to spread information to students and then to parents was a successful piece of the project. The LCPN, like the City of Garland and the City of Lewisville, were major players in getting the word out to local schools and communities about the e-Life project.

Local communities are now more aware of the factors that influence their environmental quality of life, and are taking steps in the right direction to improve water quality and the overall environment. For instance, the City of Garland noticed a sudden interest in pet waste, particularly dog waste, since the e-Life project began in 2006. Several Garland homeowners' associations

have requested that signage be placed in their neighborhoods to remind residents to pick up after their dog(s). Over the past two years, at least 4 ENS were aired on CBS/KTVT-11 and uploaded to the project website to educate the public on the health and water quality impacts of pet waste. Countless other local media have also promoted proper pet waste management through news articles, etc. While it is not clear that the homeowners' associations were directly influenced by the e-Life project, e-Life likely had a hand in spurring this interest due to its influence on the region and environmental coverage by other news stations.

Content Generation

The LCPN were also responsible for generating local content to be incorporated into on-line and/or on-air ENS. The LCPN—made up of experts from a variety of different backgrounds and fields—provided input and story content at a local level to keep the e-Life project relevant to the Upper Trinity River Watershed. The public is concerned about what's happening in their backyards and without the LCPN the e-Life project would not have had the same impact.

Challenges

Staff turnover was the biggest obstacle to the e-Life project. NCTCOG and CBS/KTVT-11 both experienced staff changes during Phase II of the project period. This created a need for new staff to become familiar with the project, spending time that otherwise could have been spent enhancing the e-Life project. During these transitional periods, more tenured StormCenter, NCTCOG, and CBS/KTVT-11 staff helped to keep up project momentum.

A post-campaign awareness survey, which the e-Life project lacked, could have been useful in demonstrating the project's success. A pre-campaign awareness survey conducted by the University of North Texas (UNT) in 2005 surveyed citizens in the Upper Trinity River Watershed to determine their knowledge, understanding, and concerns on water and watershed issues. A follow up to this survey at the end of the e-Life project would help identify current levels of citizen knowledge about water issues. Whether current levels represent an increase or decrease in knowledge from the pre-project awareness survey could be related to the e-Life project. Though we lack such supporting data, it is our belief that the North Central Texas public is currently more aware of environmental issues across the region than it was in 2005 and that more citizens are applying this knowledge to their everyday activities in an effort to protect our natural resources. It would be difficult to award this gain in knowledge entirely to the e-Life project, as there are several "green" initiatives going on across the region to educate the public on their environmental footprints. Despite these limitations, however, we believe e-Life has played a role in achieving an increase in public awareness of the relationship of water to the larger North Texas environment.

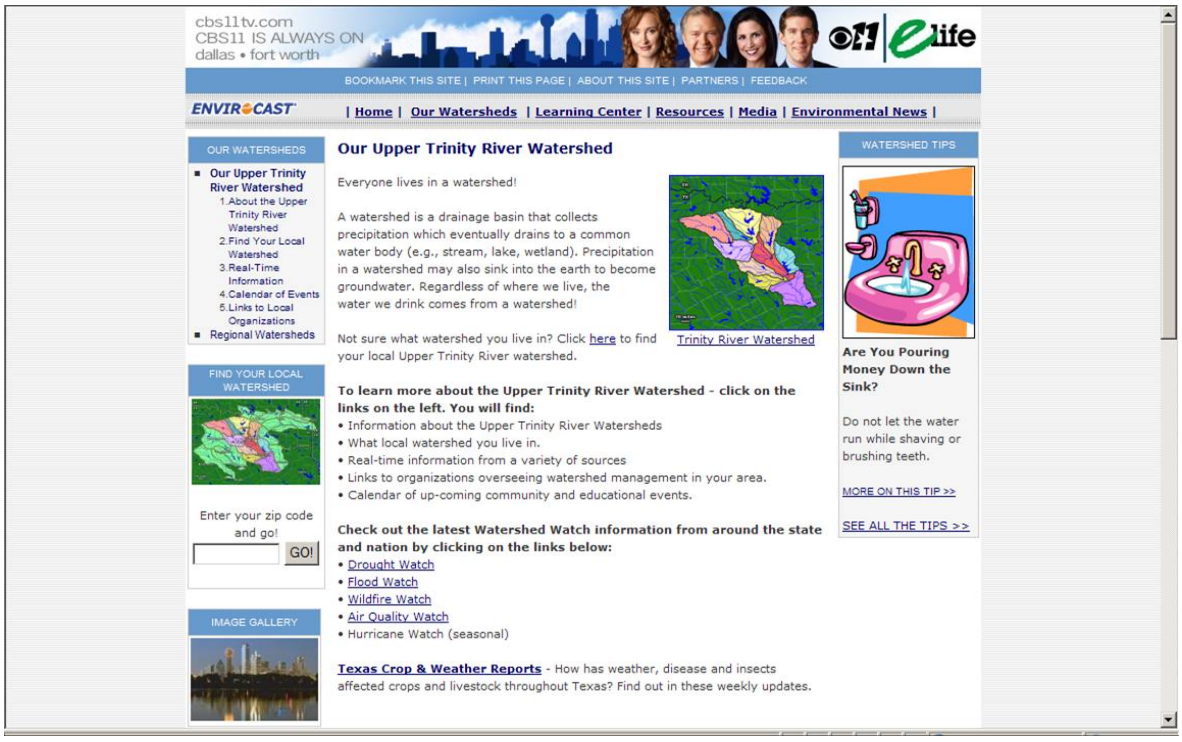
CONCLUSION

The e-Life project was successful at increasing awareness about local environmental issues to promote a systemic change in the attitude and behavior of citizens to protect watershed resources in North Central Texas. The on-air and on-line components of the project provided the distribution and communication mechanisms necessary to disseminate environmental science information to the public effectively and efficiently. Station viewership and on-line page loads provided evidence that the public was interested in learning about their environmental quality of life and how to protect watershed resources and the environment in North Central Texas.

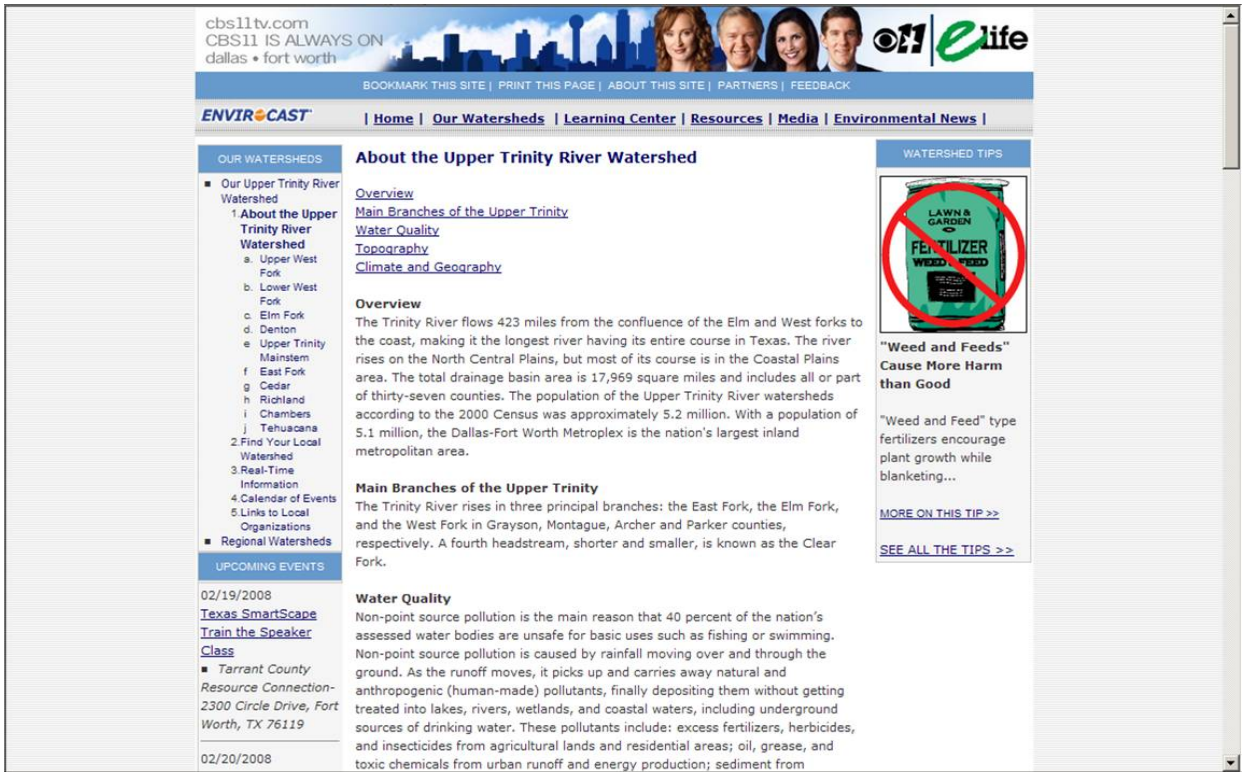
APPENDICES

Appendix A: e-Life Home Web Page

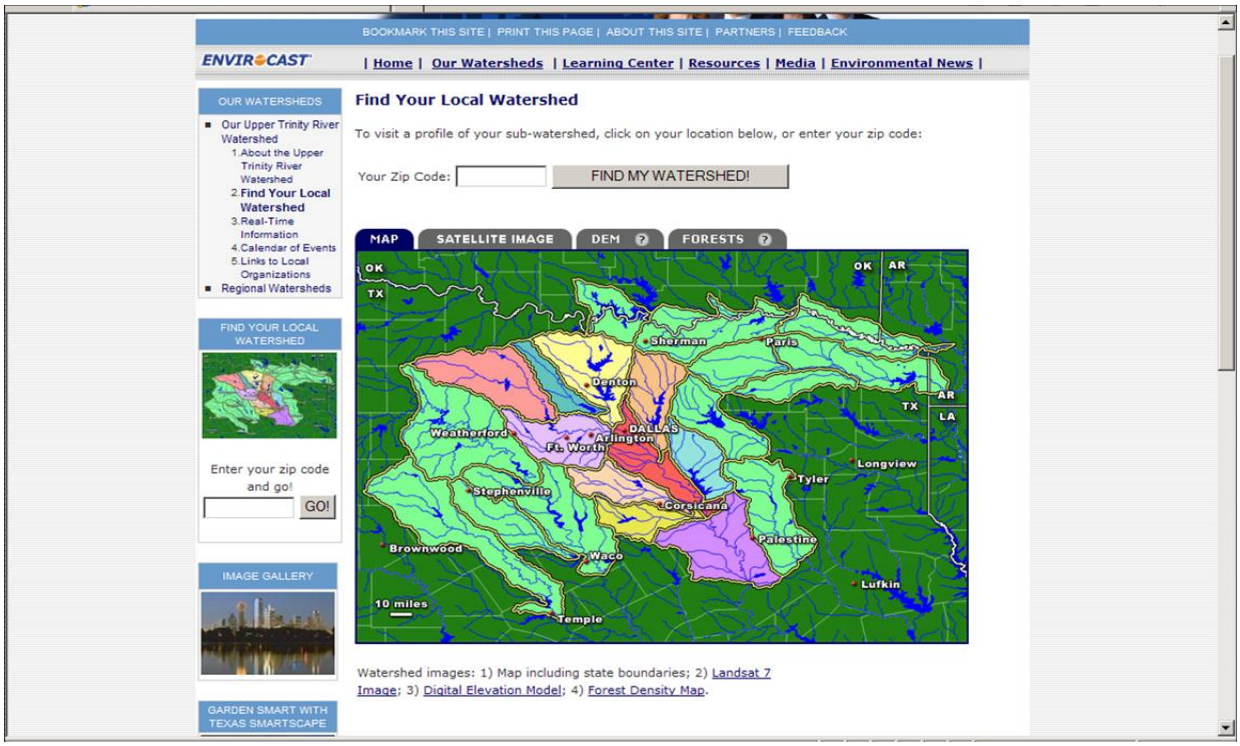
Appendix B: Our Watersheds Web Page



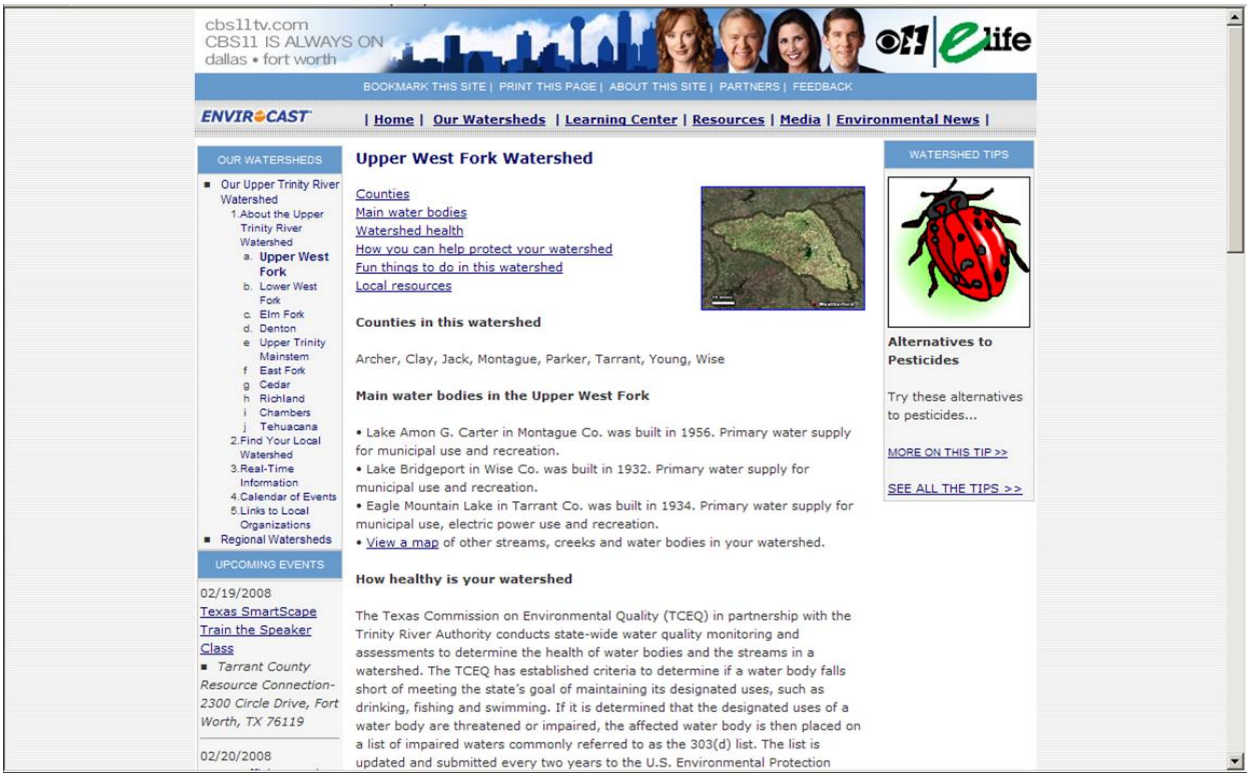
Appendix C: About the Upper Trinity River Watershed Web Page



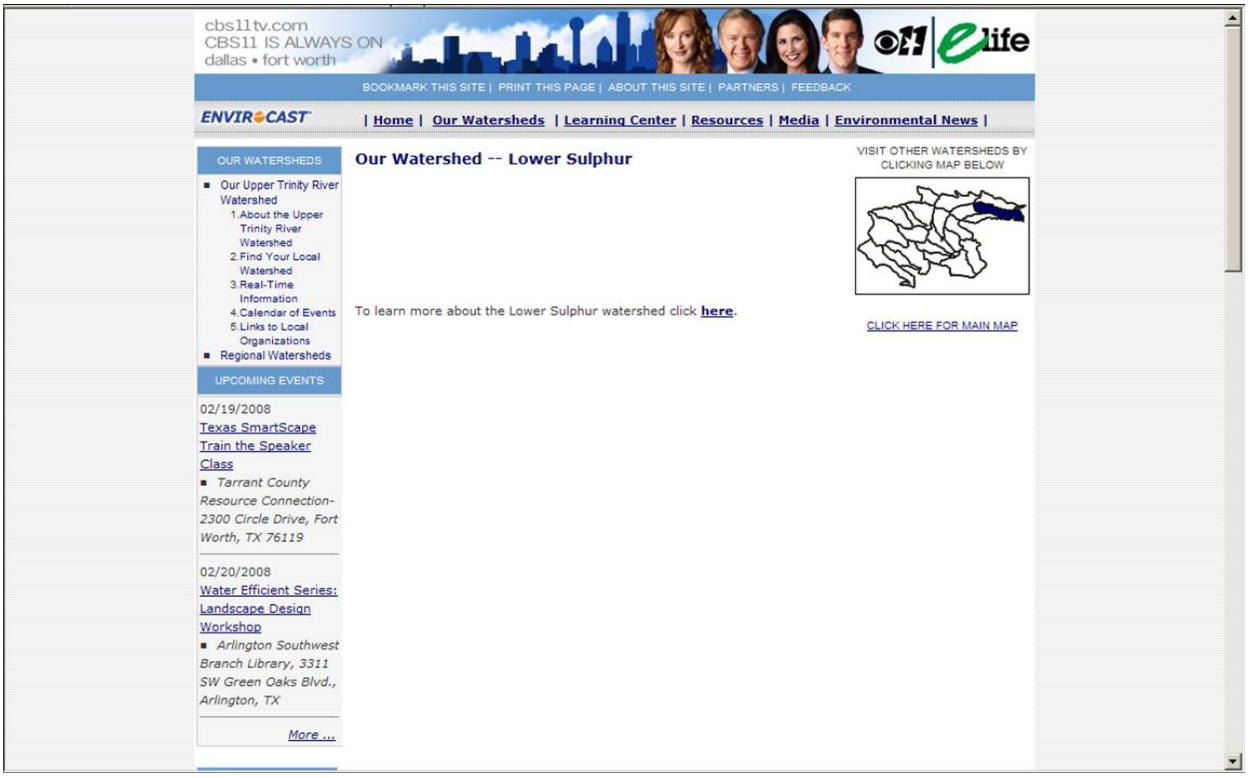
Appendix D: Find Your Local Watershed Feature



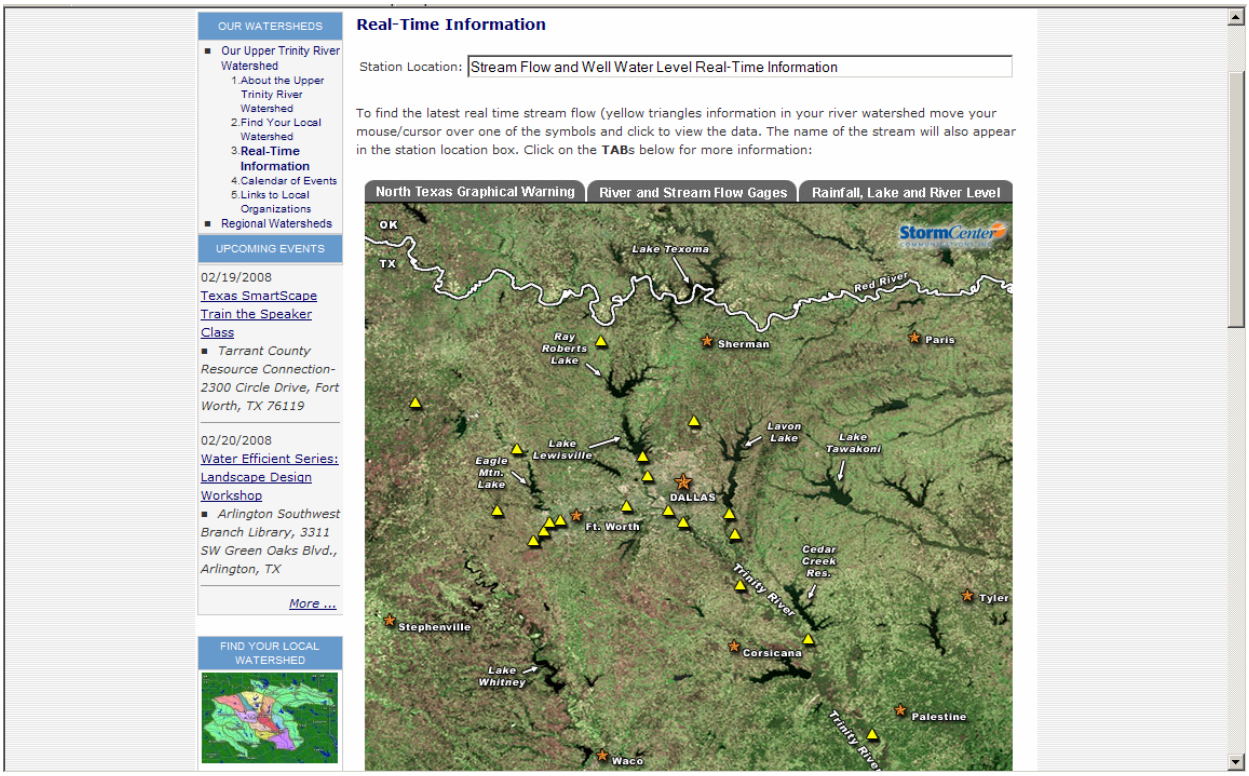
Appendix E: Upper Trinity River Sub-Watershed Detailed Information Page



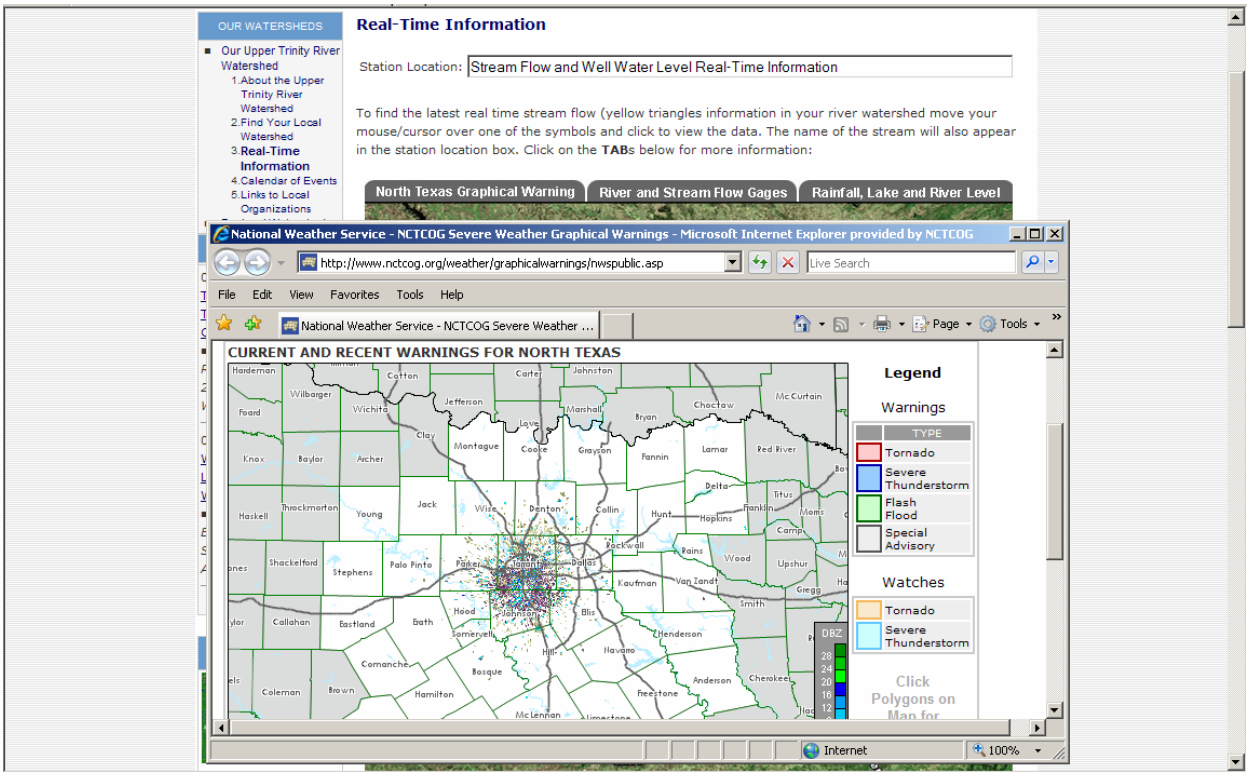
Appendix F: Sub-Watershed Information Page Outside the Upper Trinity River Watershed



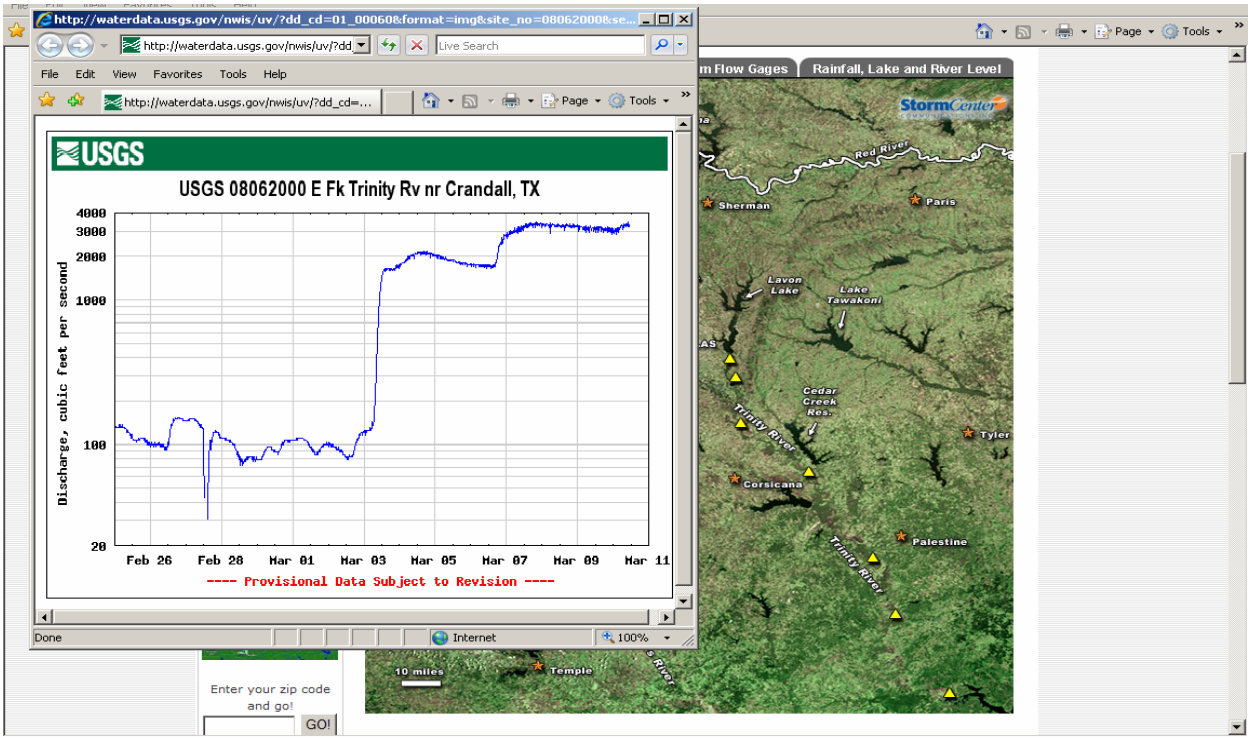
Appendix G: Real-Time Information



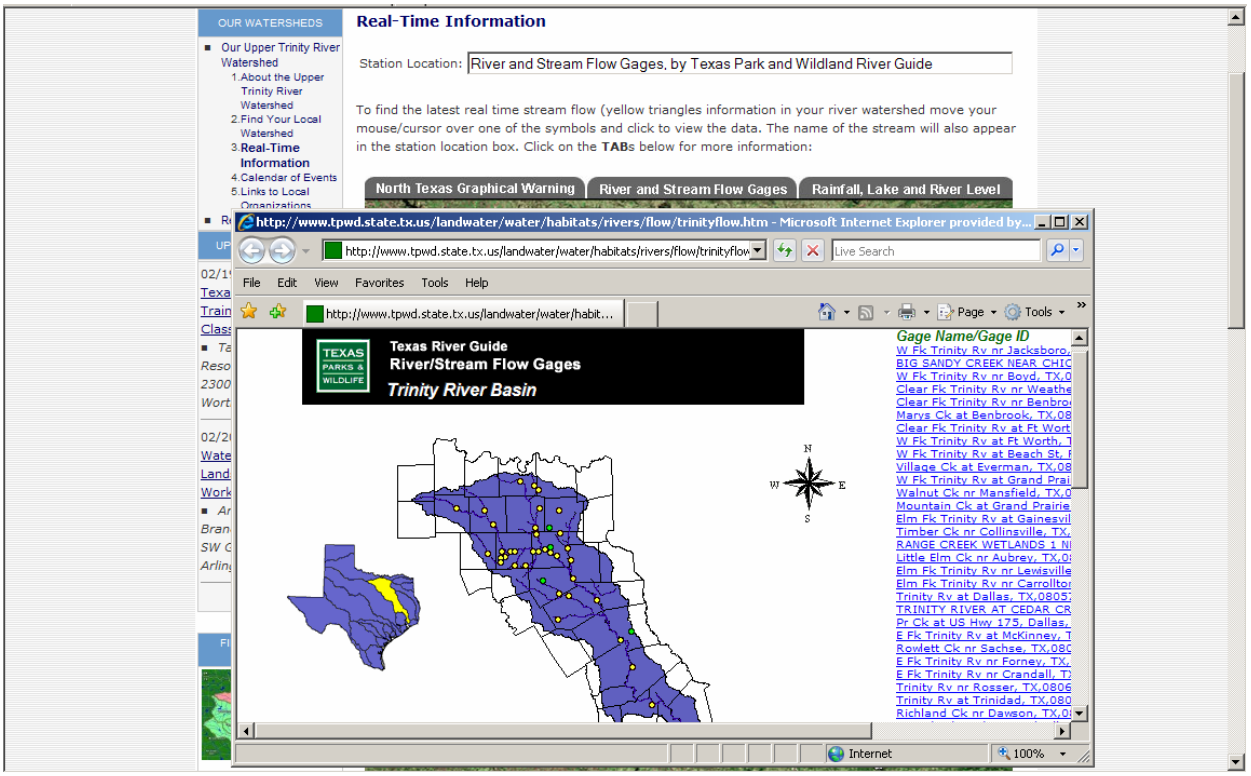
Appendix H: Graphical Warnings for the North Central Texas Region



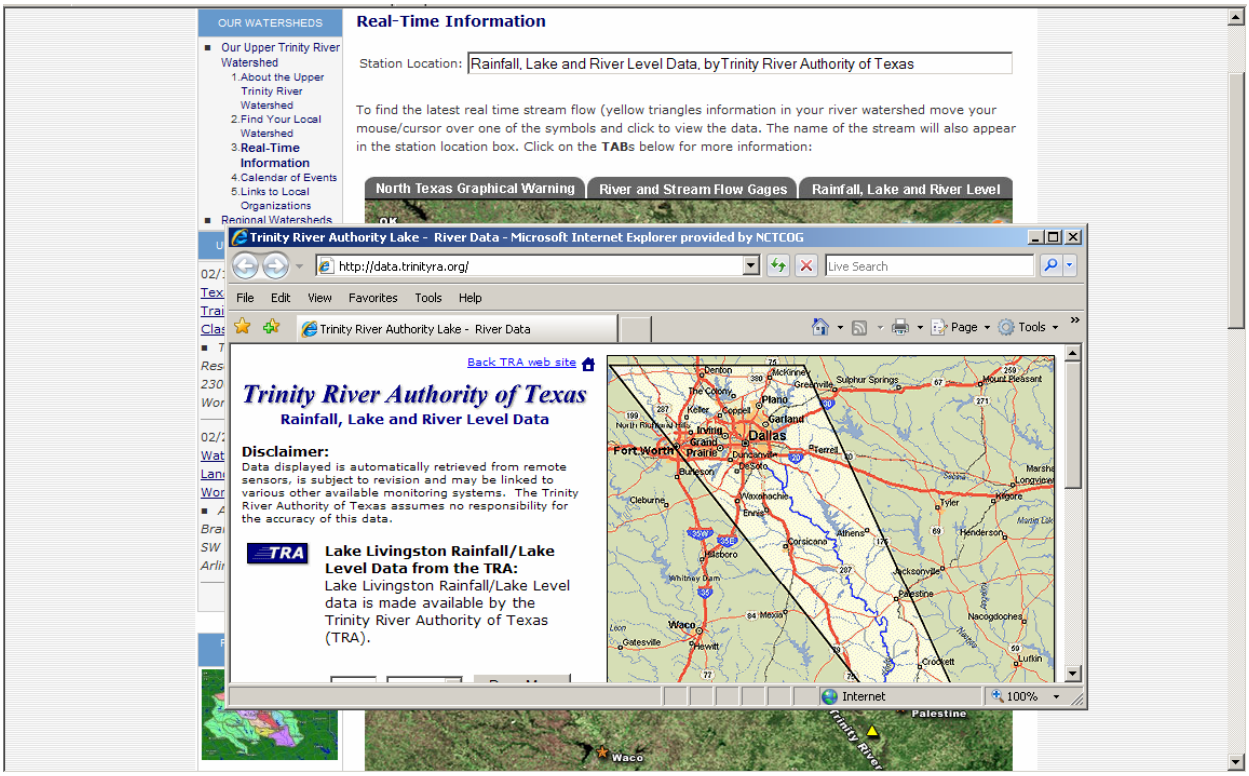
Appendix I: Stream Flow for Stations Located in North Central Texas



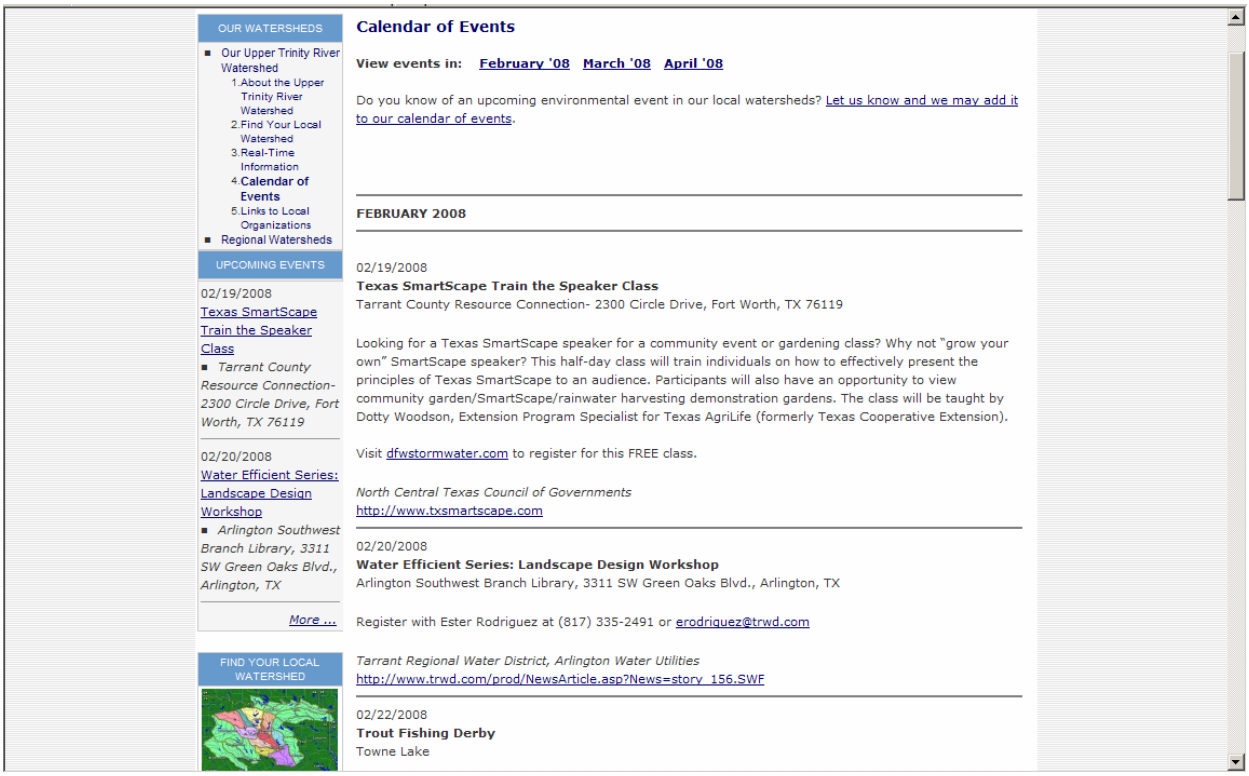
Appendix J: River/Stream Flow Gauges in the Trinity River Basin



Appendix K: Rainfall, Lake, and River Level Data in the Trinity River Basin



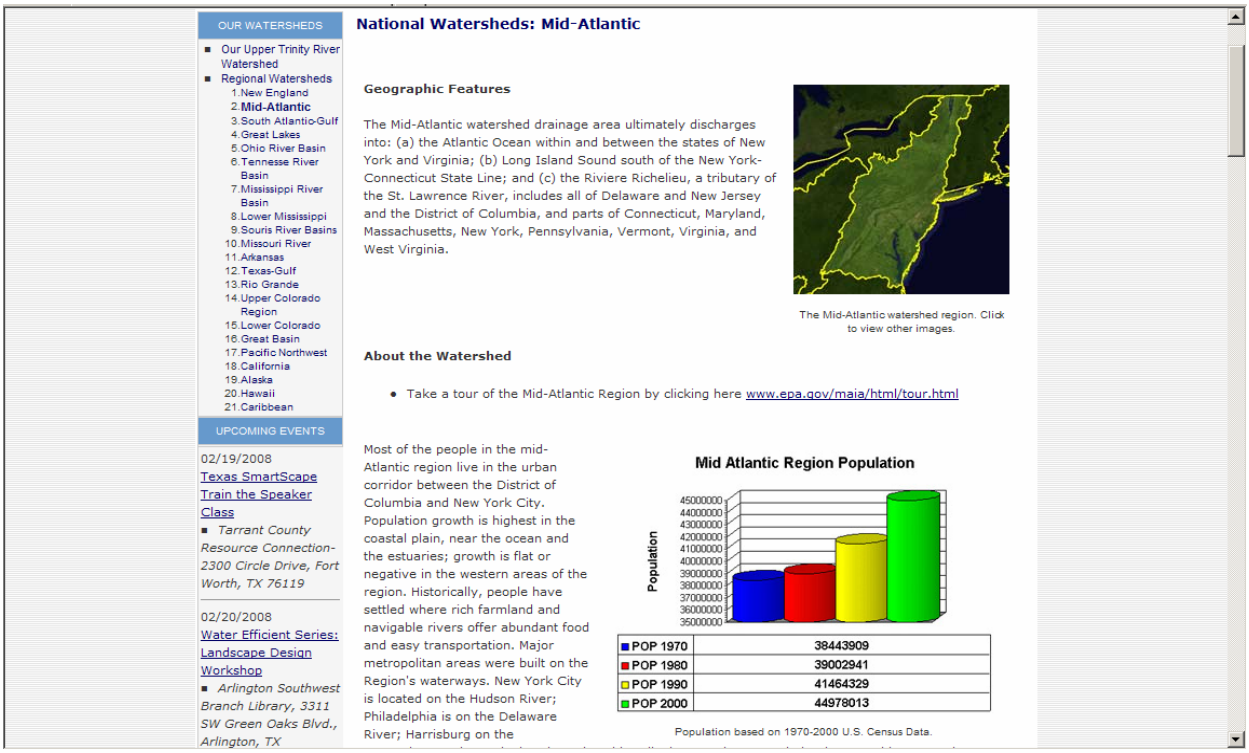
Appendix L: Calendar of Events Web Page



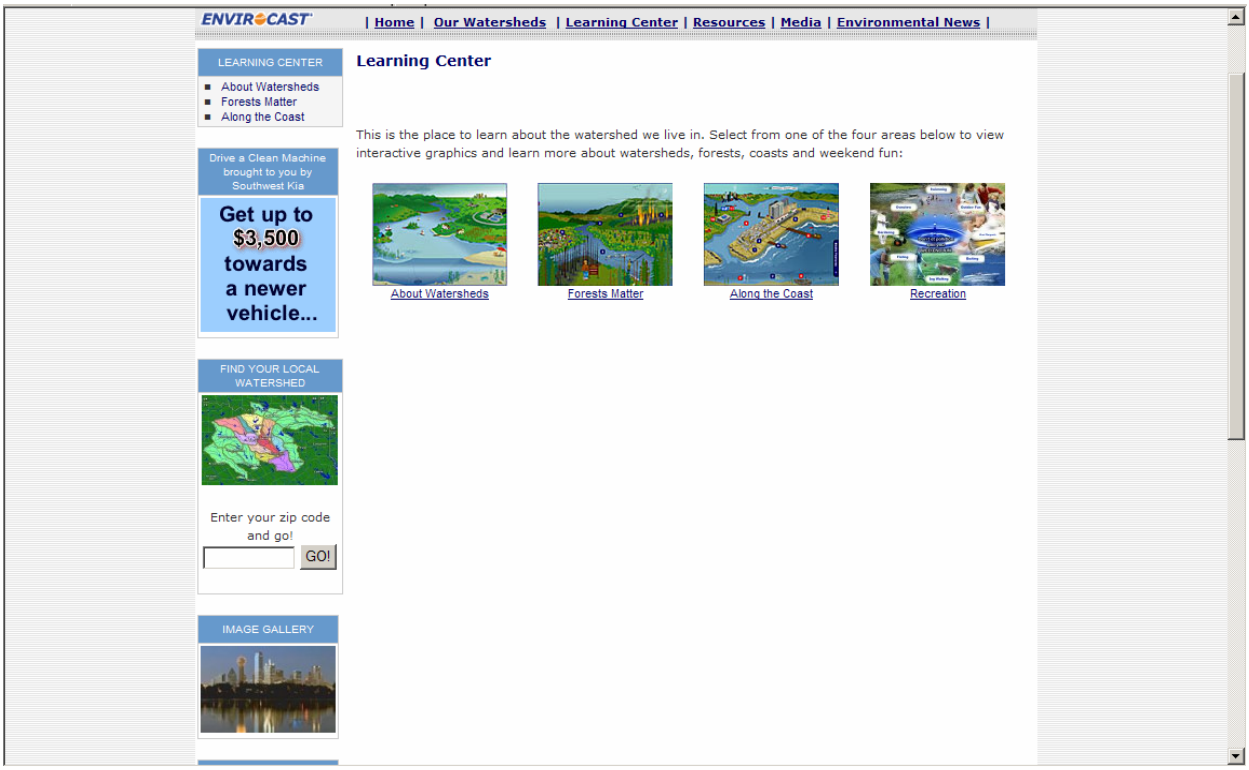
Appendix M: Links to Local Organizations Web Page

Appendix N: Regional Watersheds Web Page

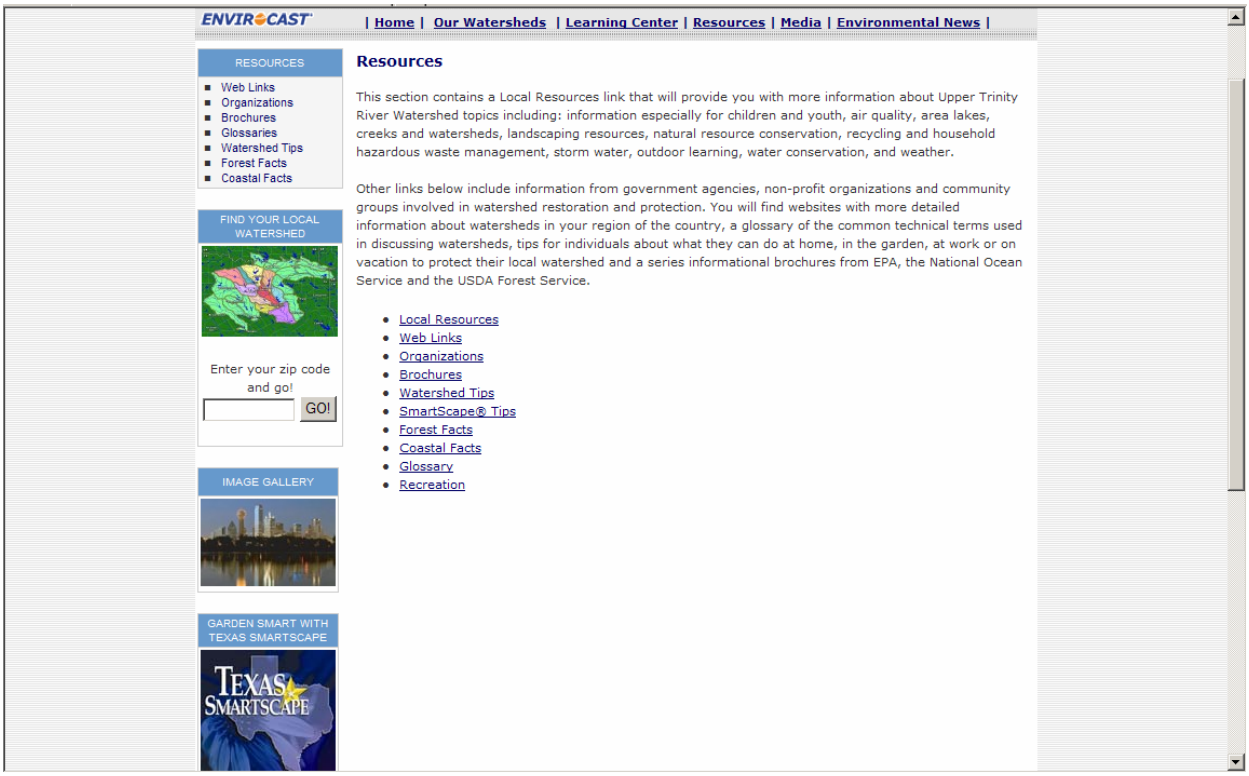
Appendix O: Regional Watersheds Information Web Page



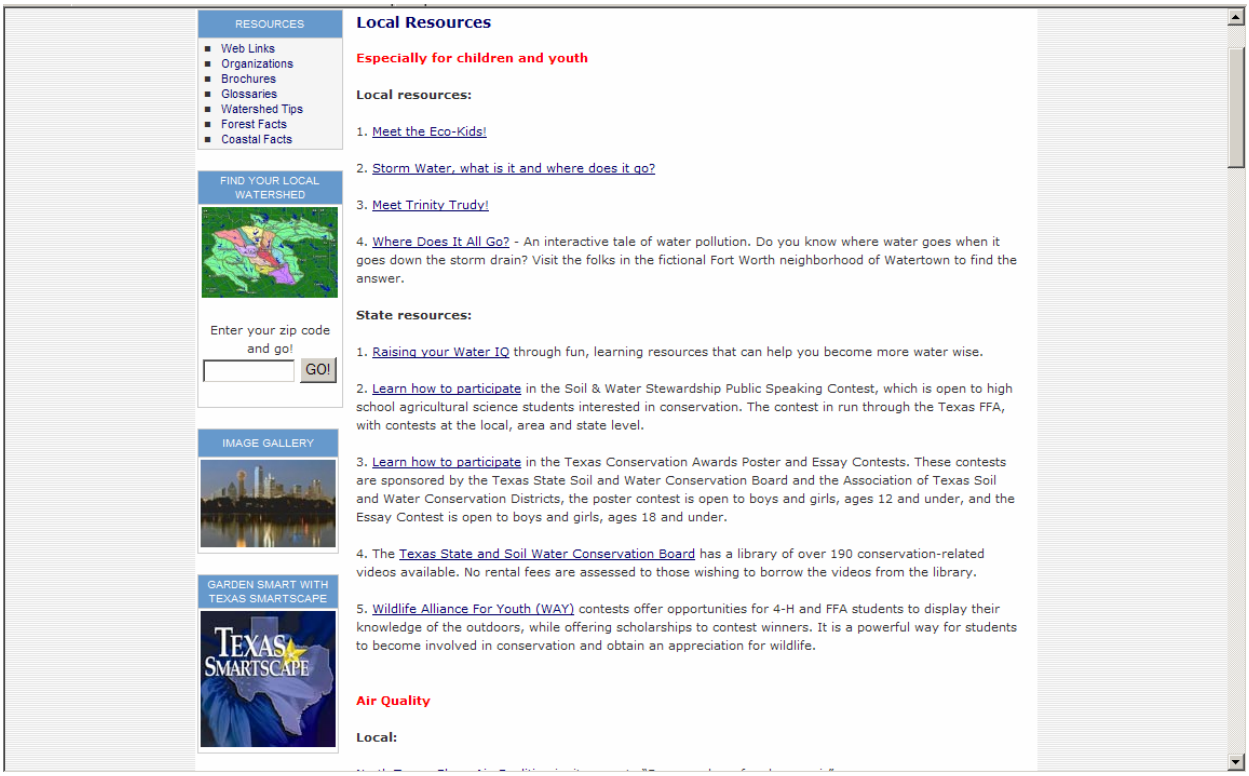
Appendix P: Learning Center Web Page



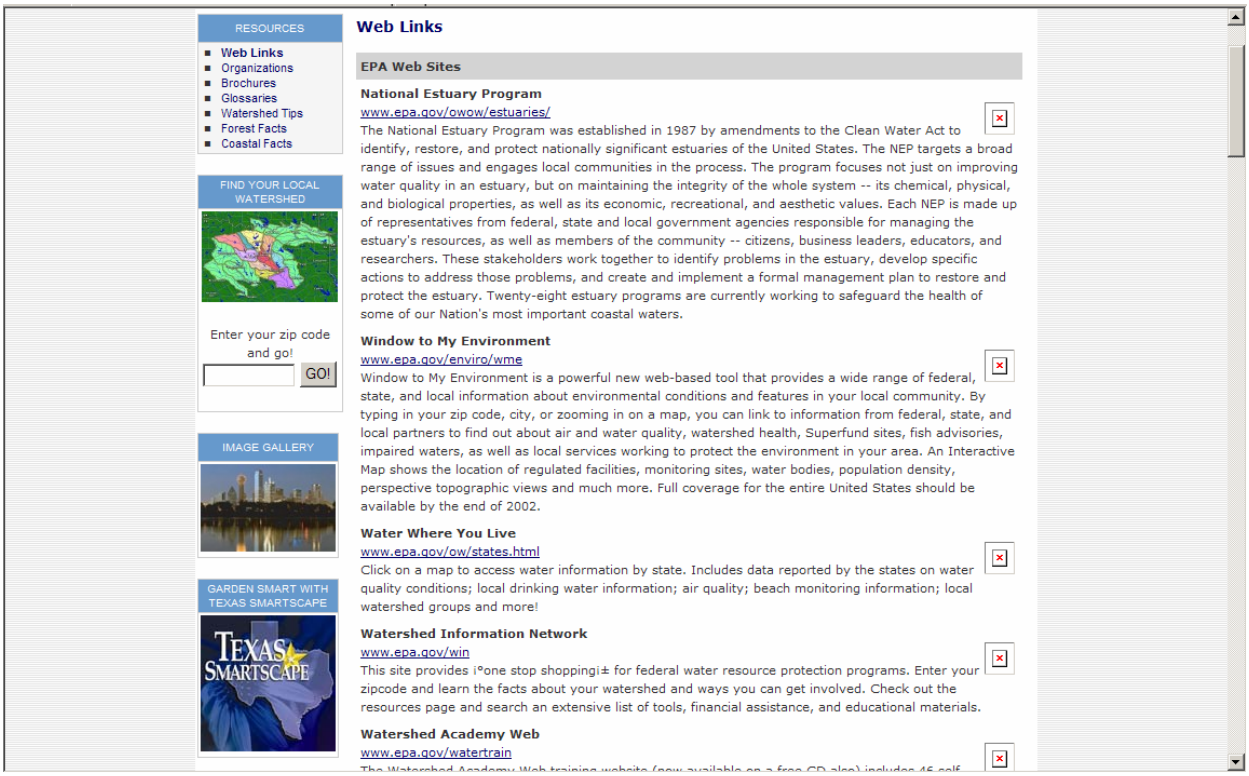
Appendix Q: Resources Web Page



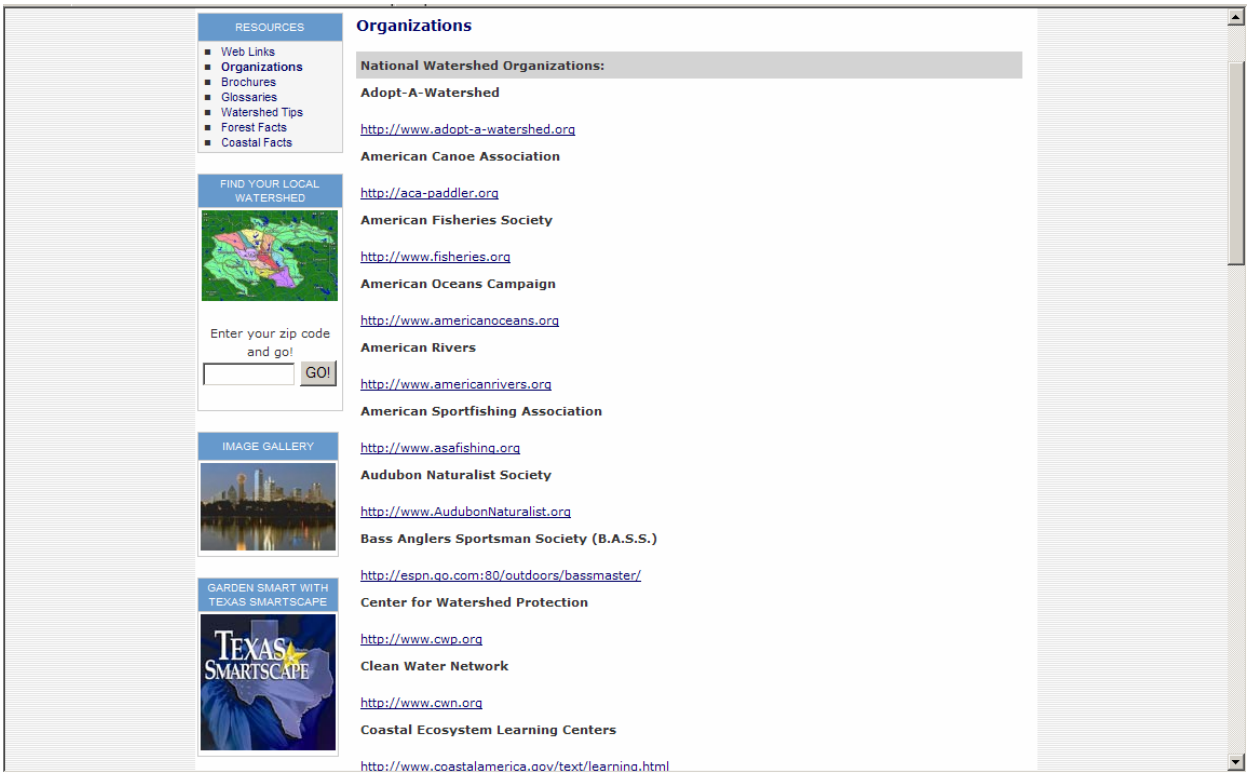
Appendix R: Local Resources Web Page



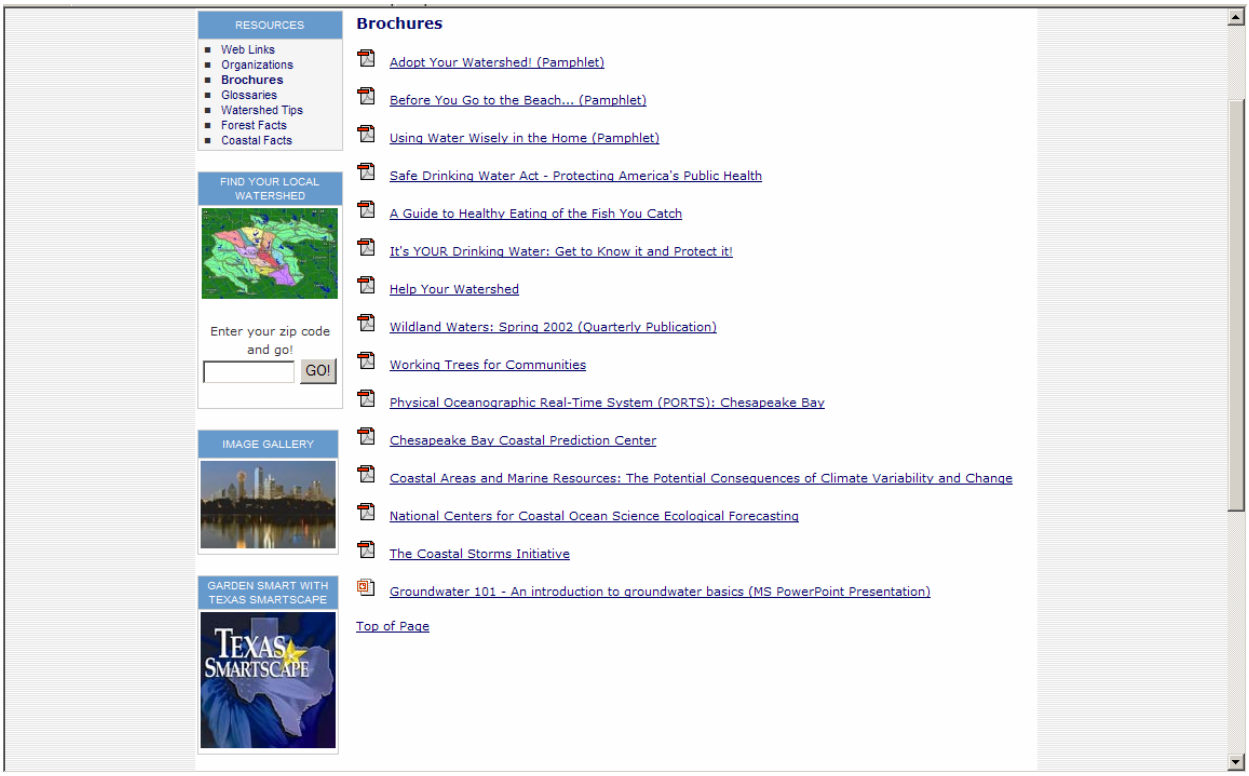
Appendix S: Web Links Web Page



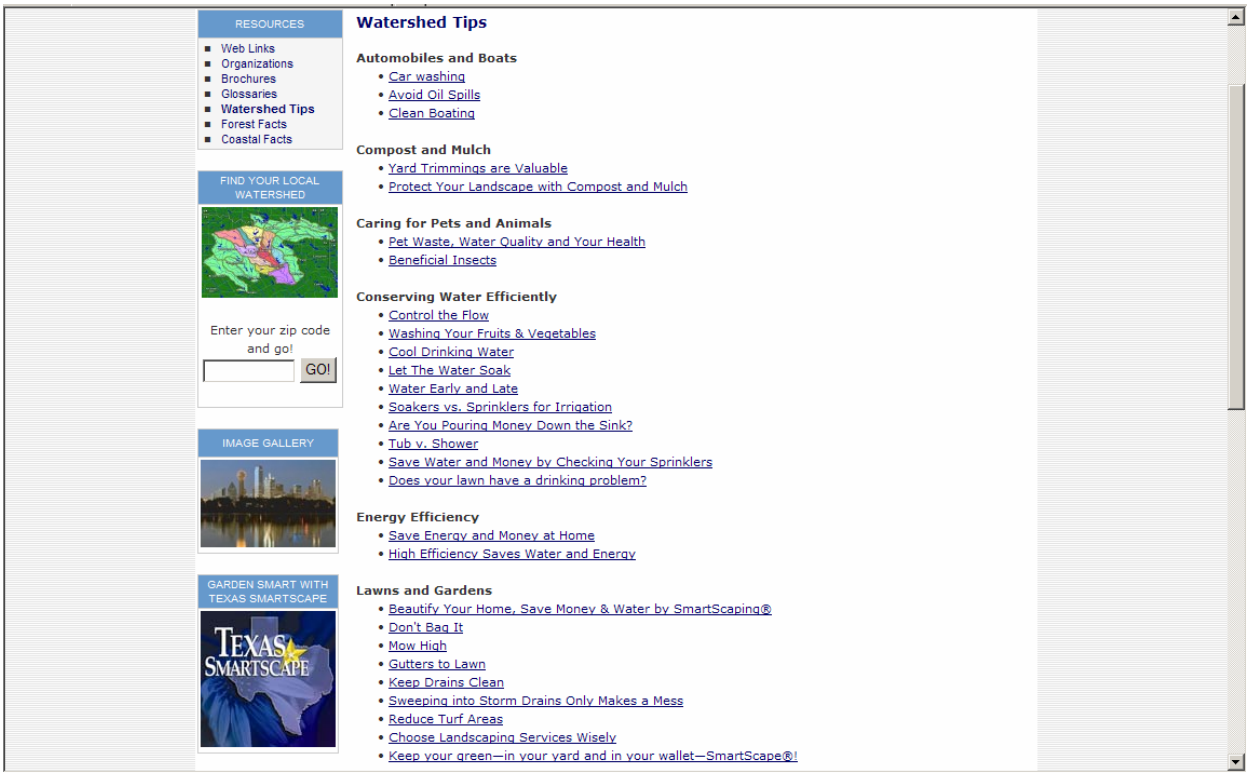
Appendix T: Organizations Web Page



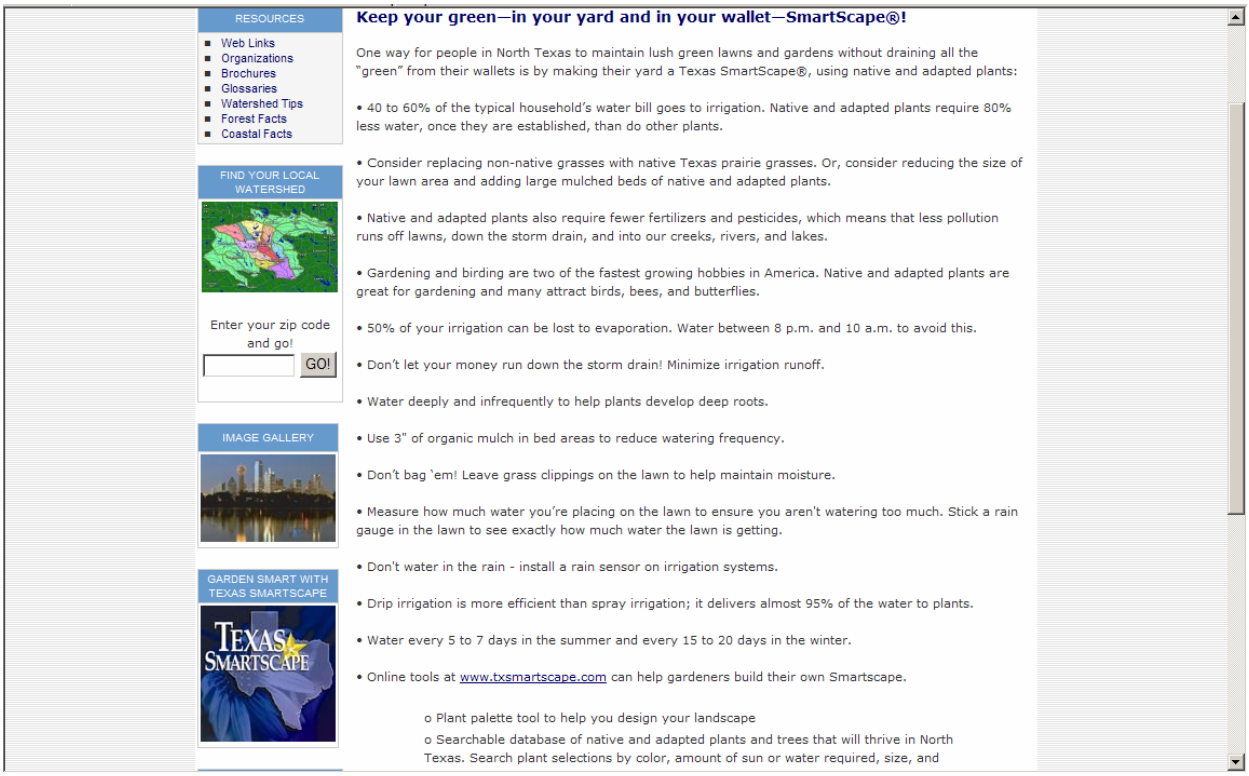
Appendix U: Brochures Web Page



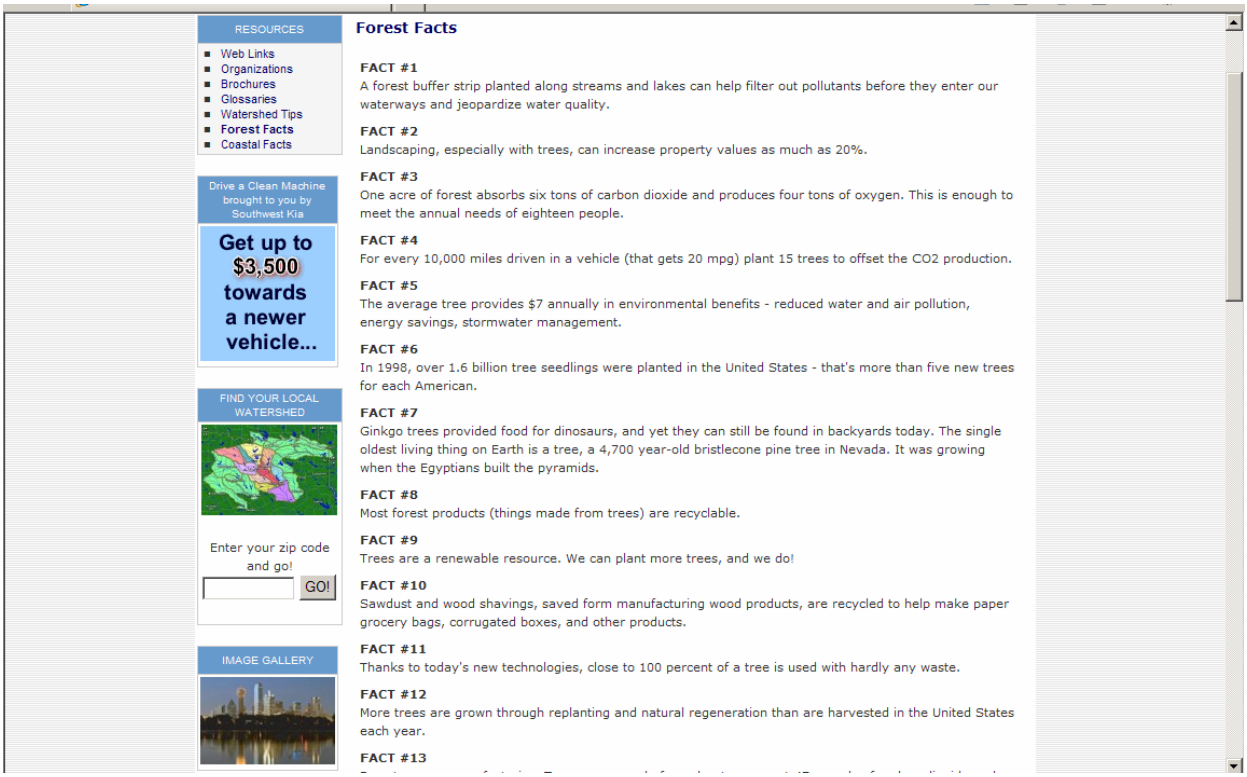
Appendix V: Watershed Tips Web Page



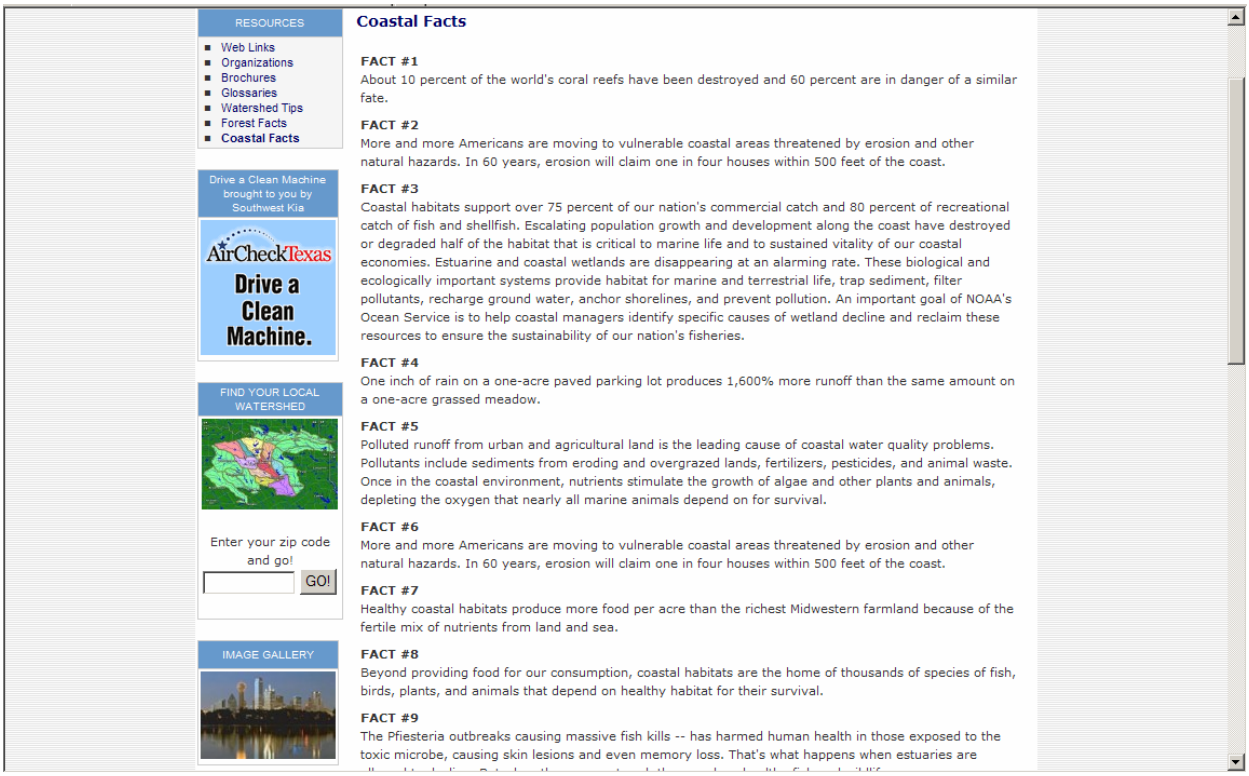
Appendix W: SmartScape® Tips Web Page



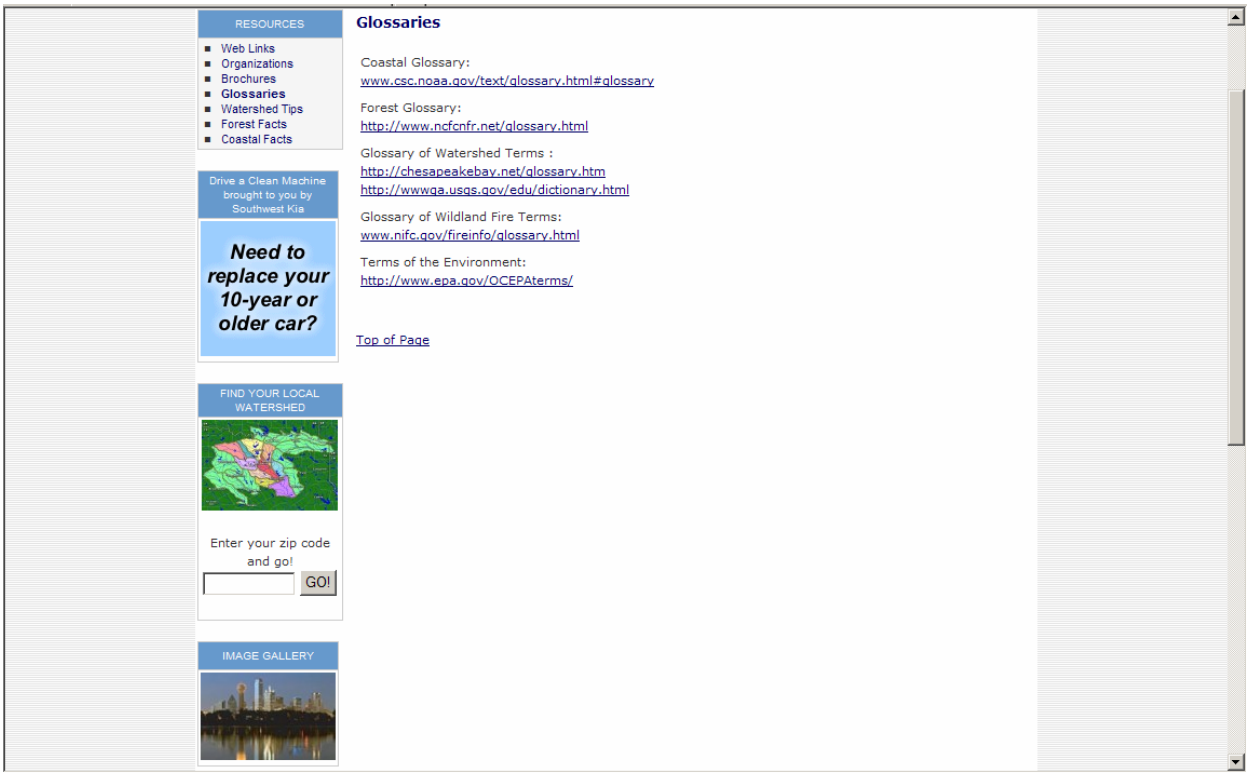
Appendix X: Forest Facts Web Page



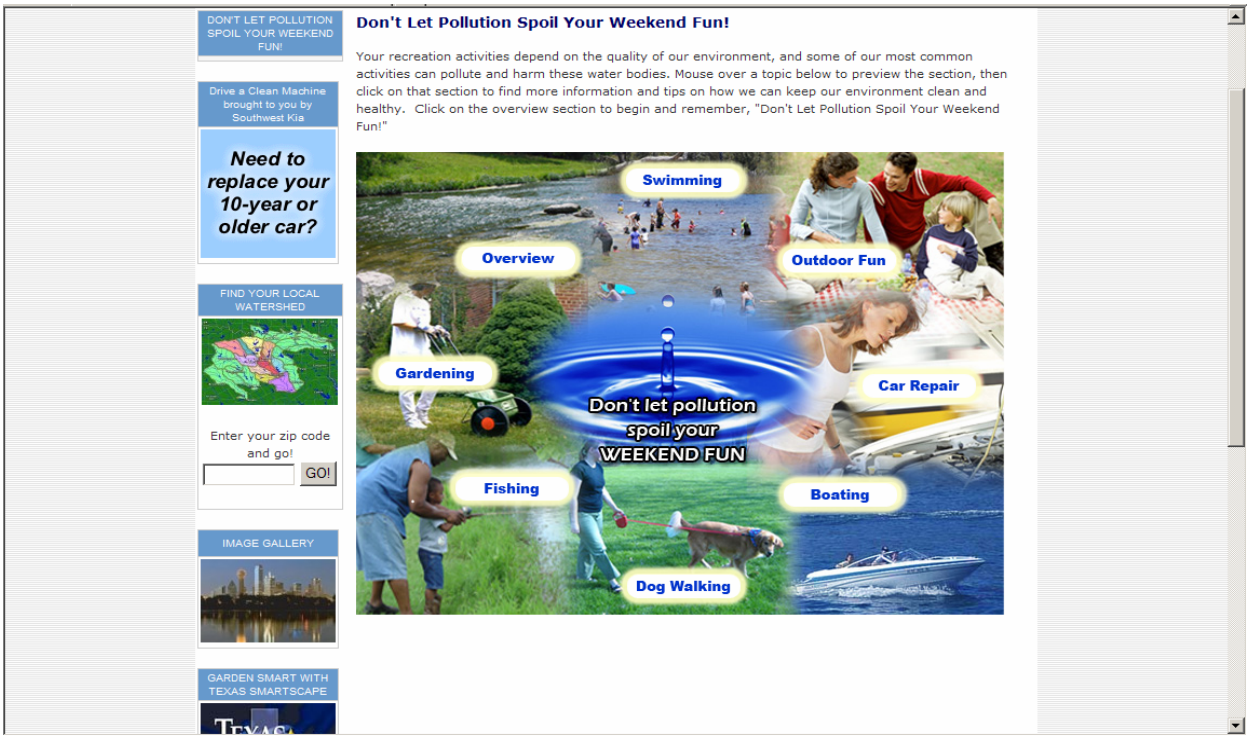
Appendix Y: Coastal Facts Web Page



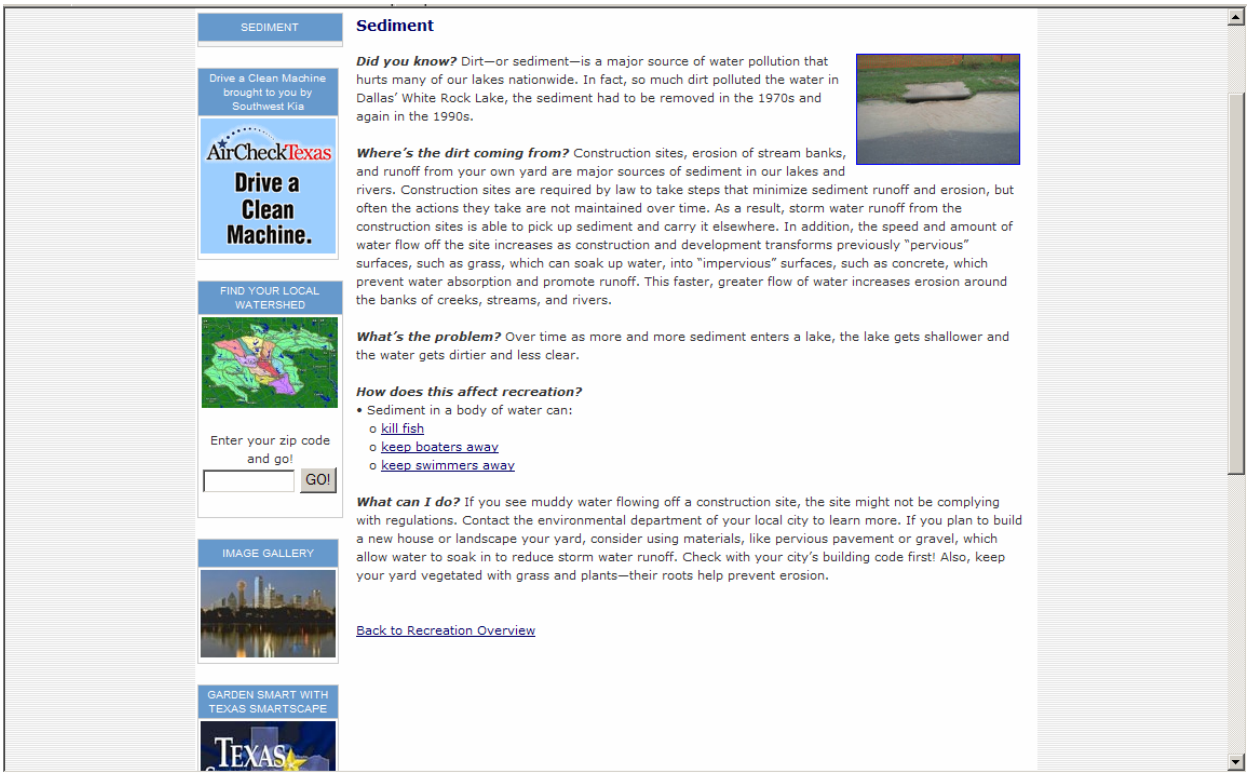
Appendix Z: Glossary Web Page



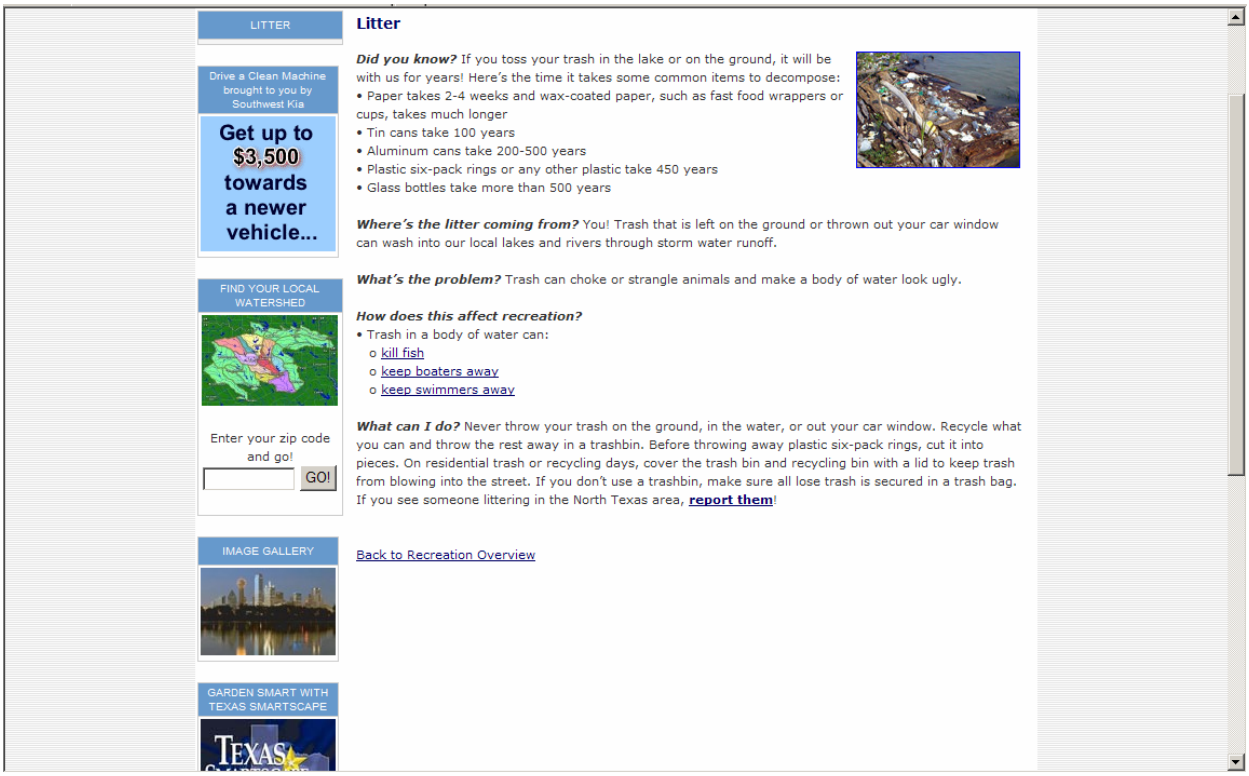
Appendix AA: Recreation Main Web Page



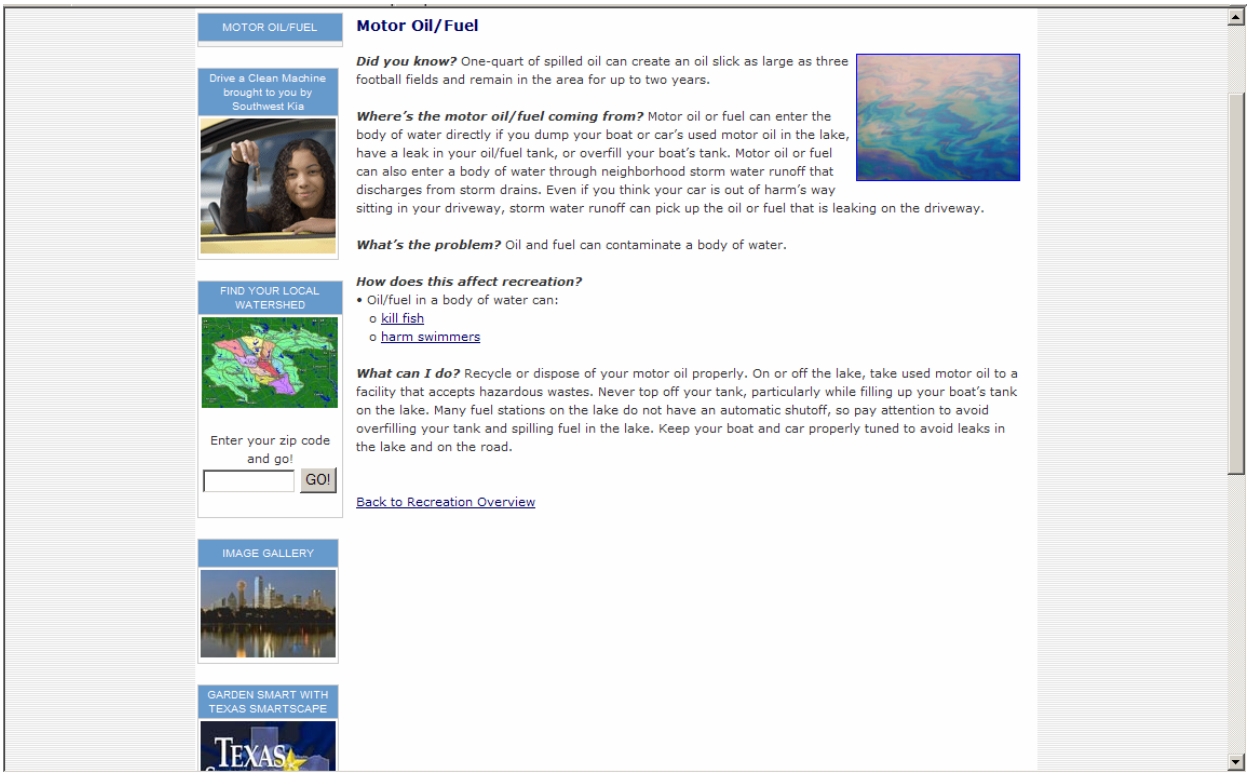
Appendix AB: Dirt/Sediment Web Page



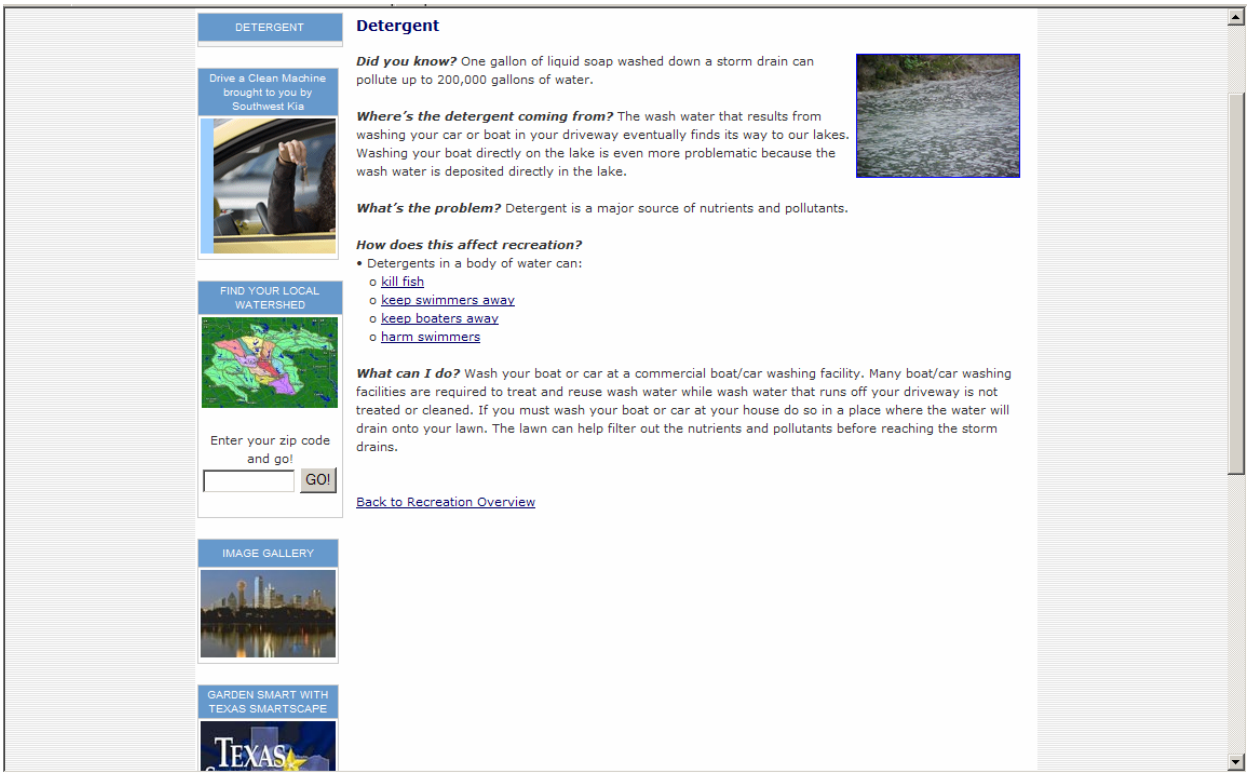
Appendix AC: Litter Web Page



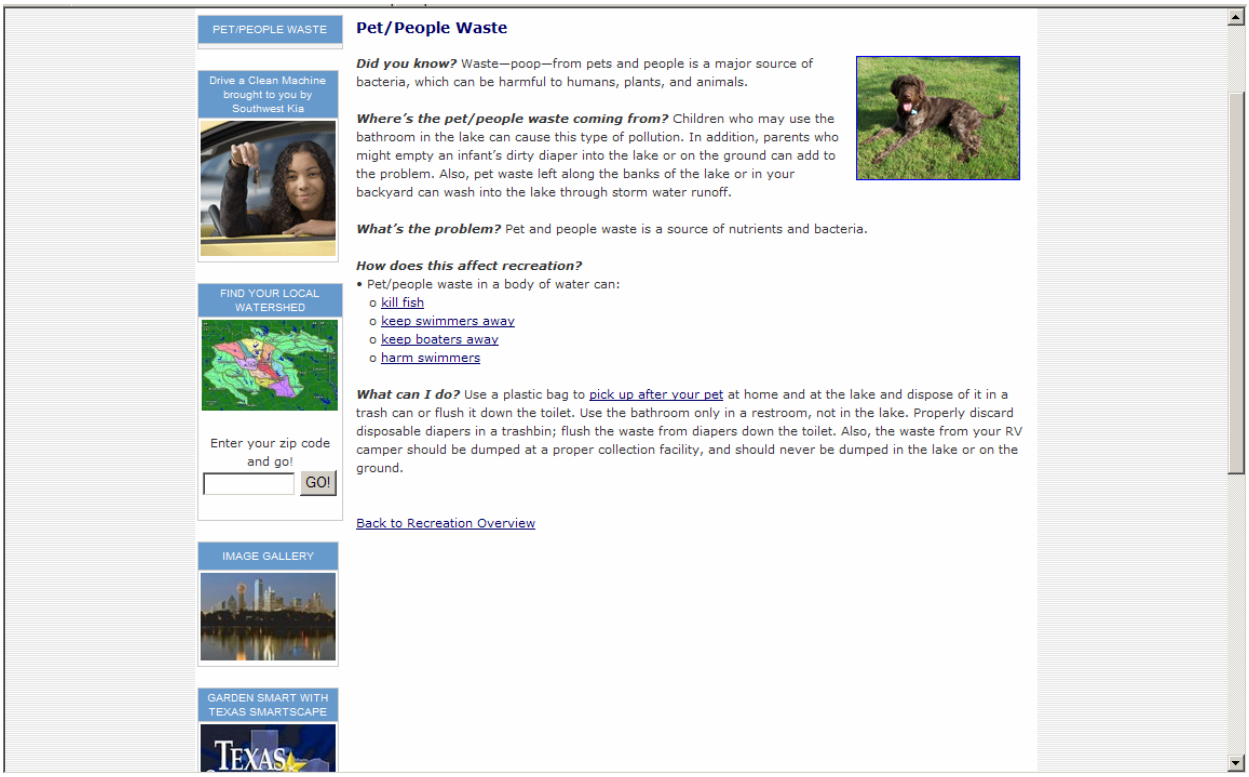
Appendix AD: Motor Oil/Fuel Web Page



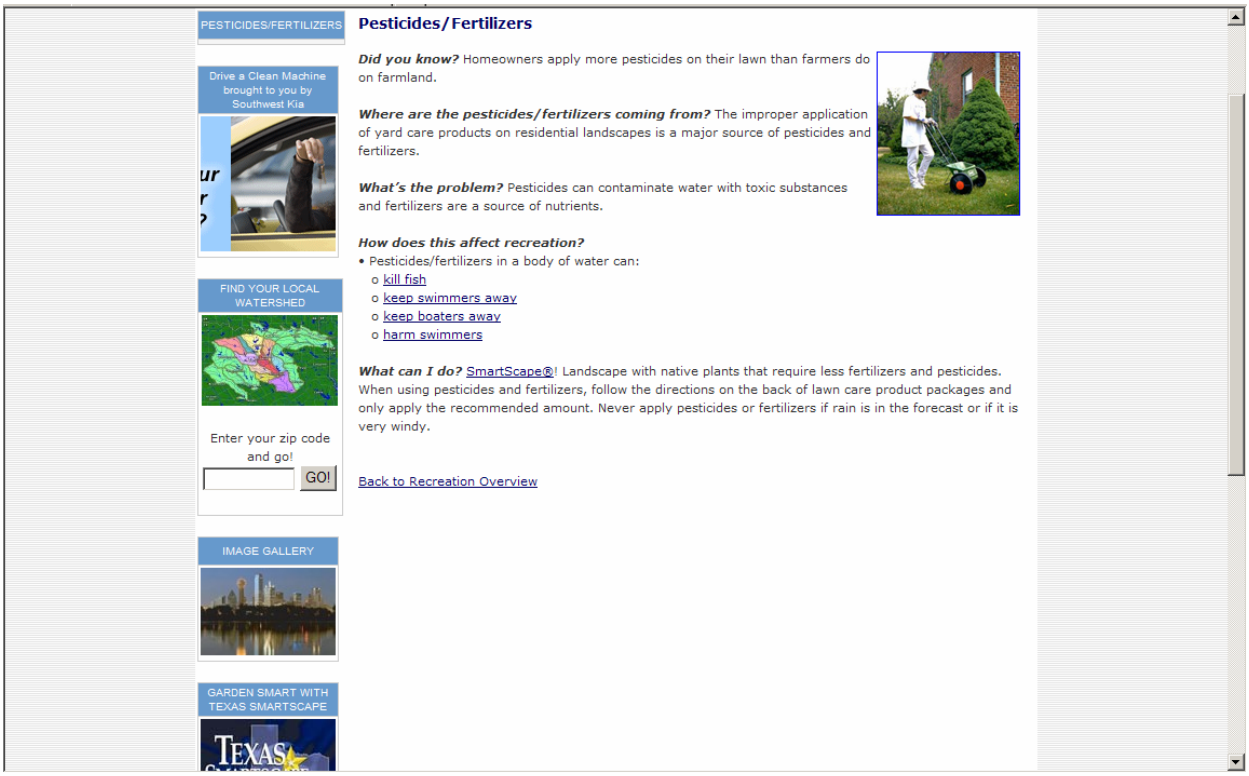
Appendix AE: Detergent Web Page



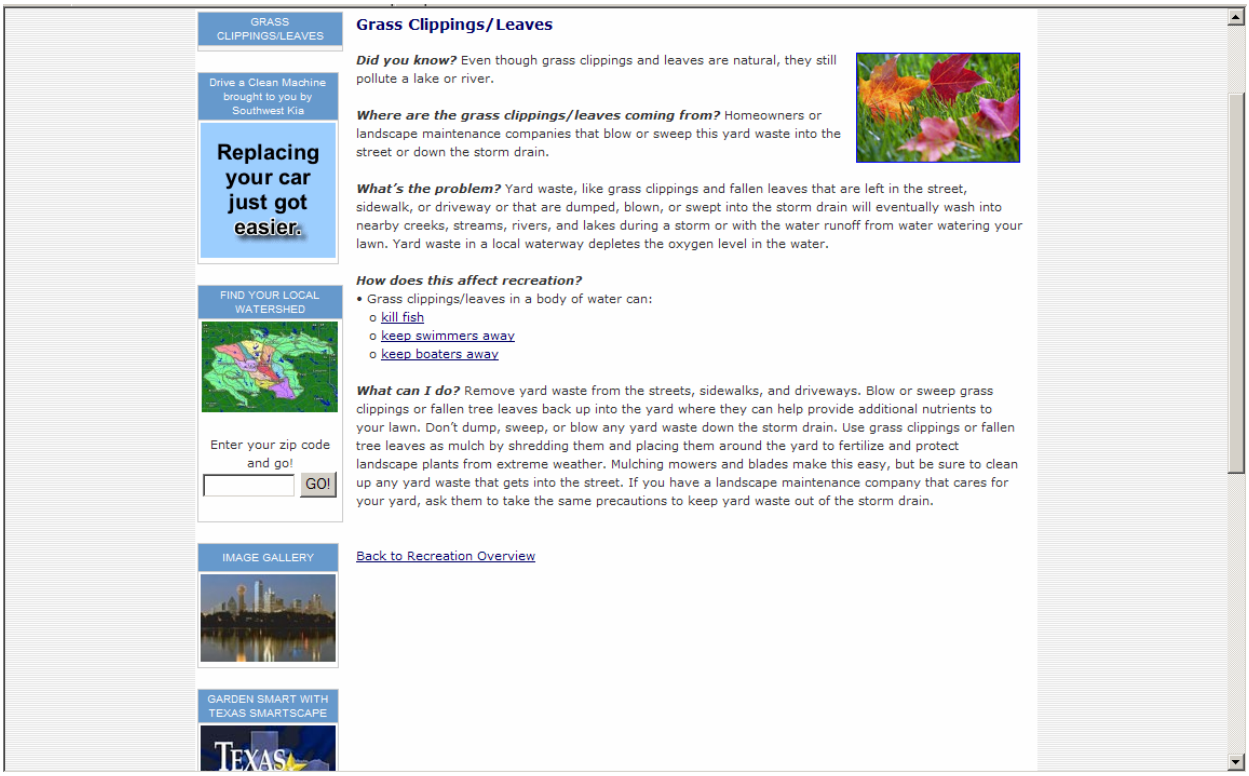
Appendix AF: Pet/People Waste Web Page



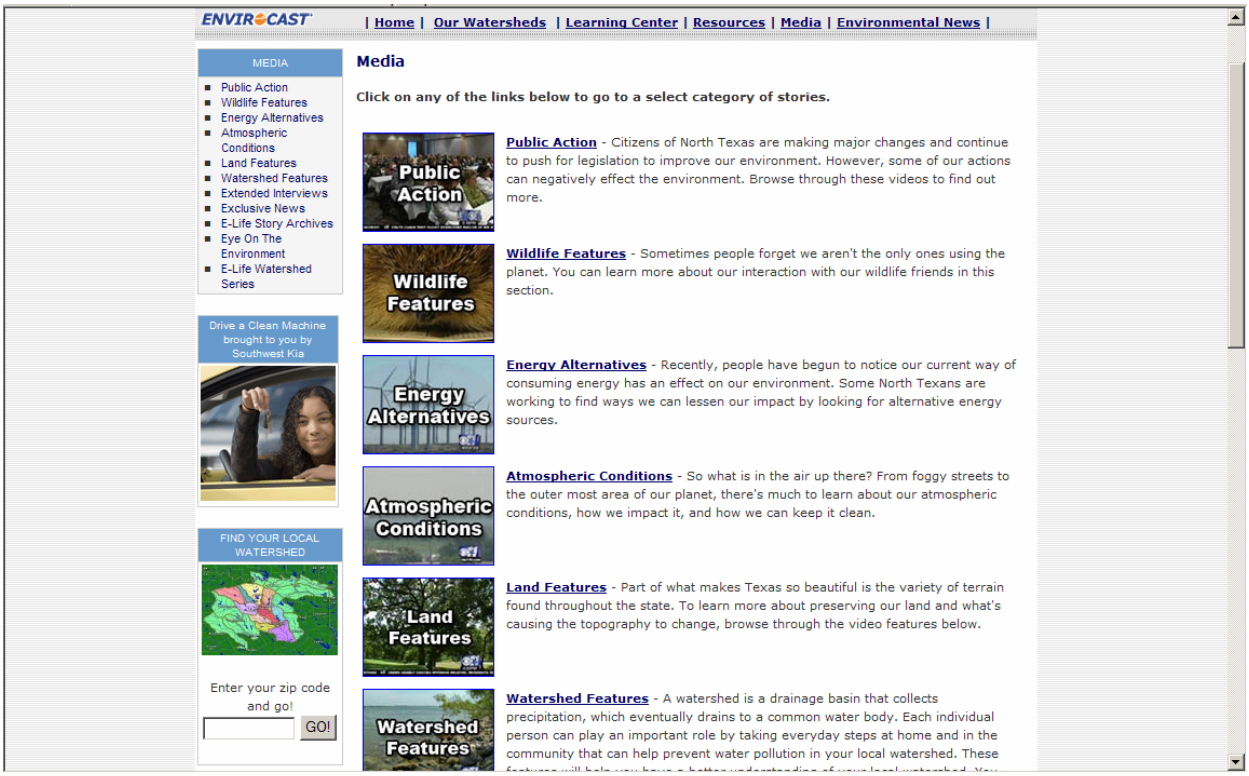
Appendix AG: Fertilizers/Pesticides Web Page



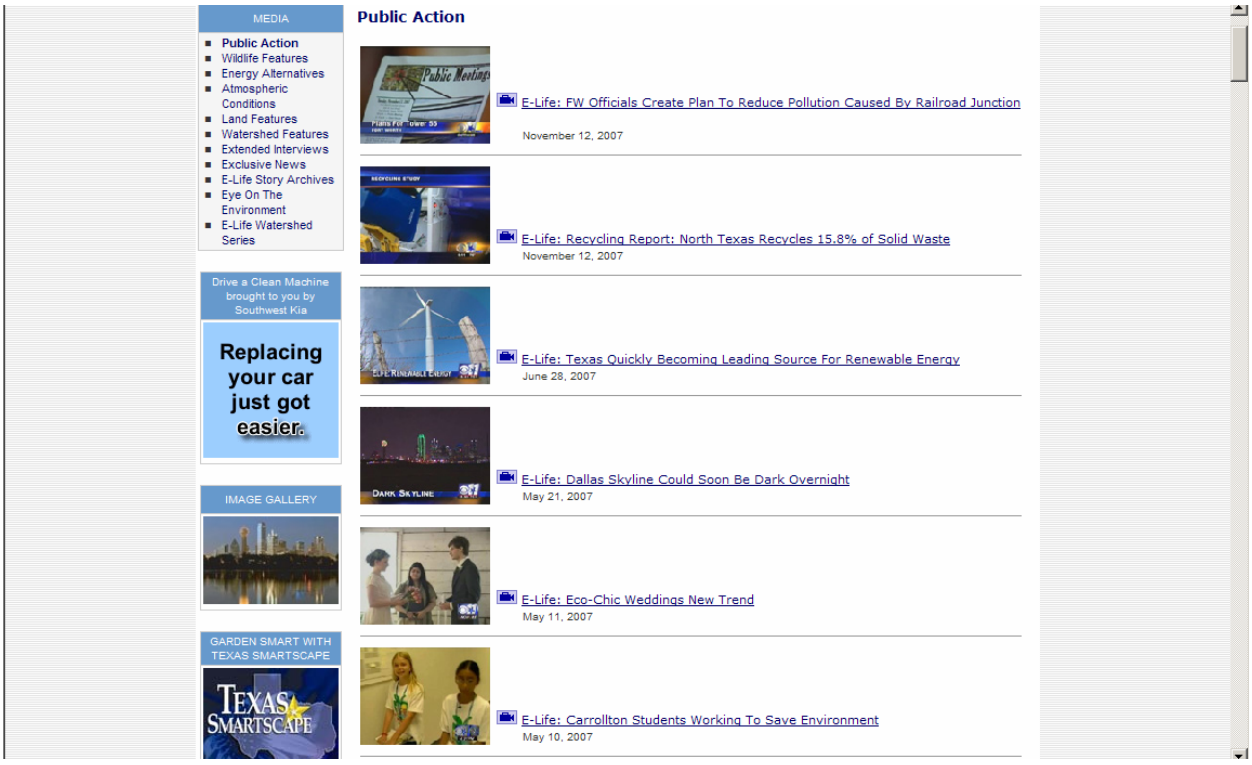
Appendix AH: Grass Clippings/Leaves Web Page



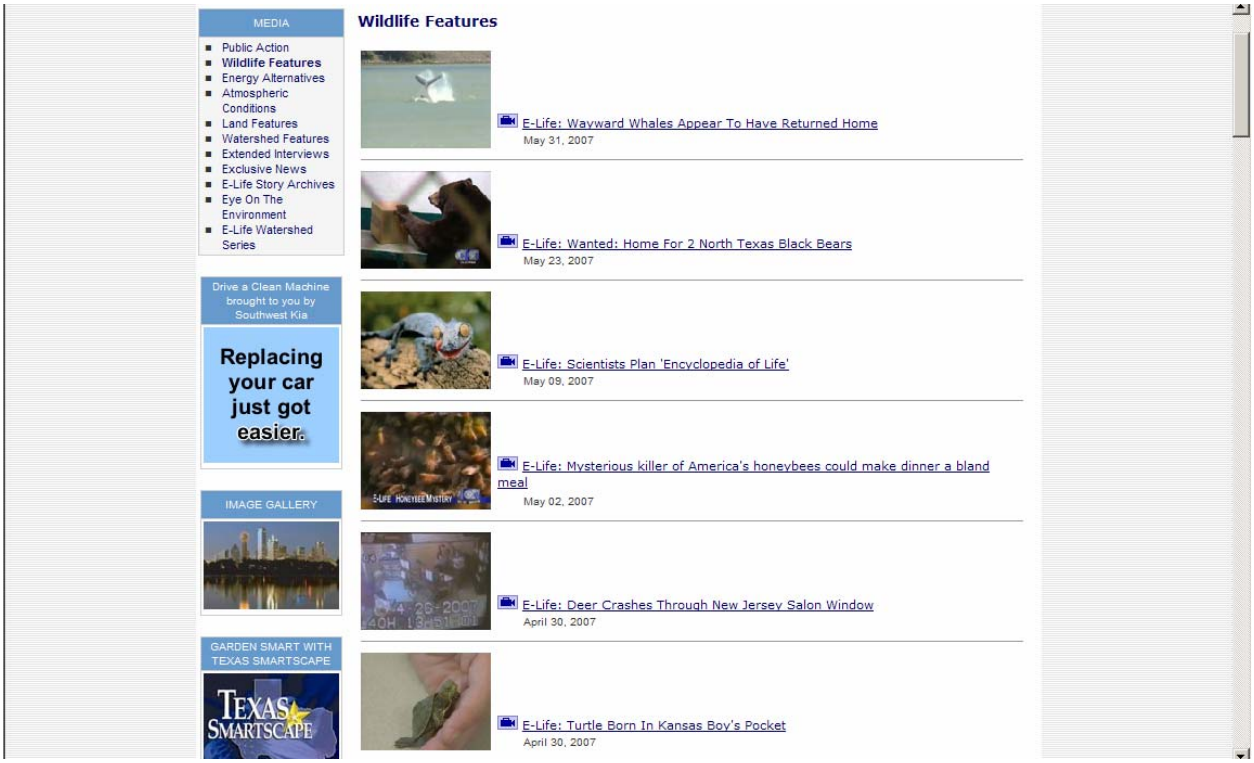
Appendix AI: Media Web Page



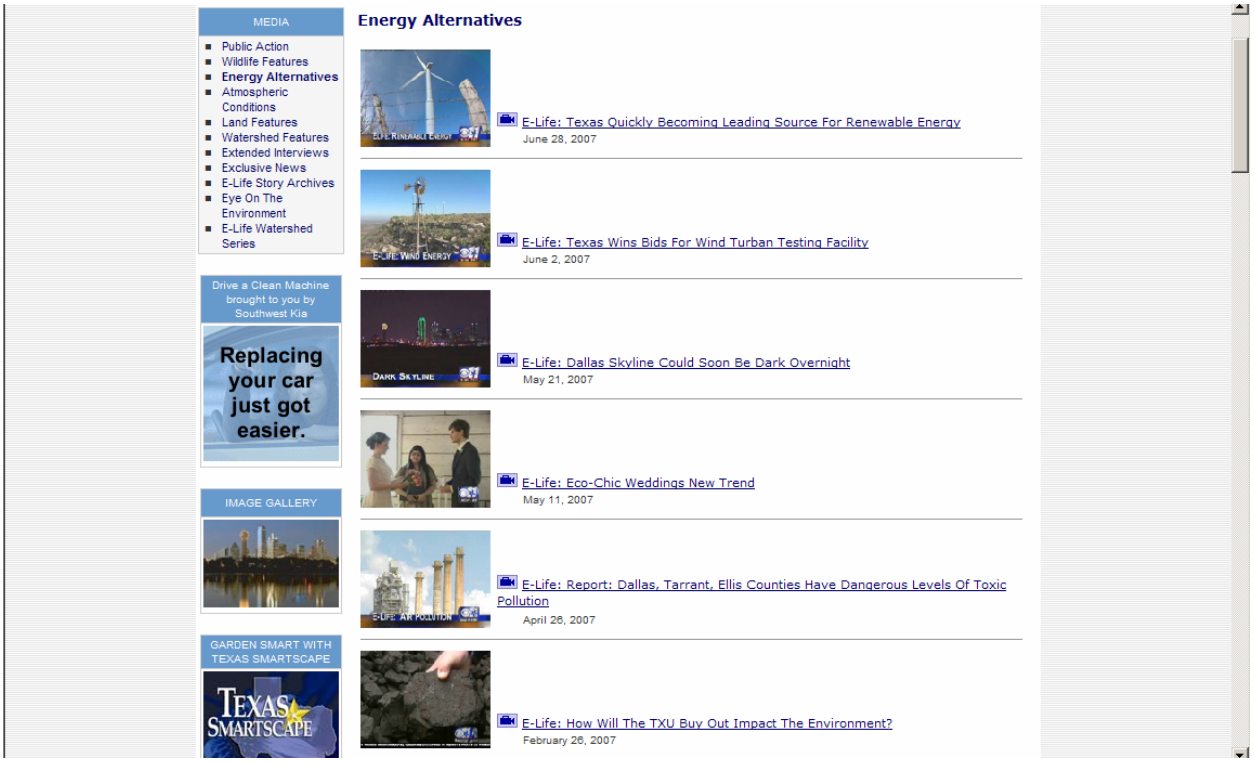
Appendix AJ: Public Action Web Page



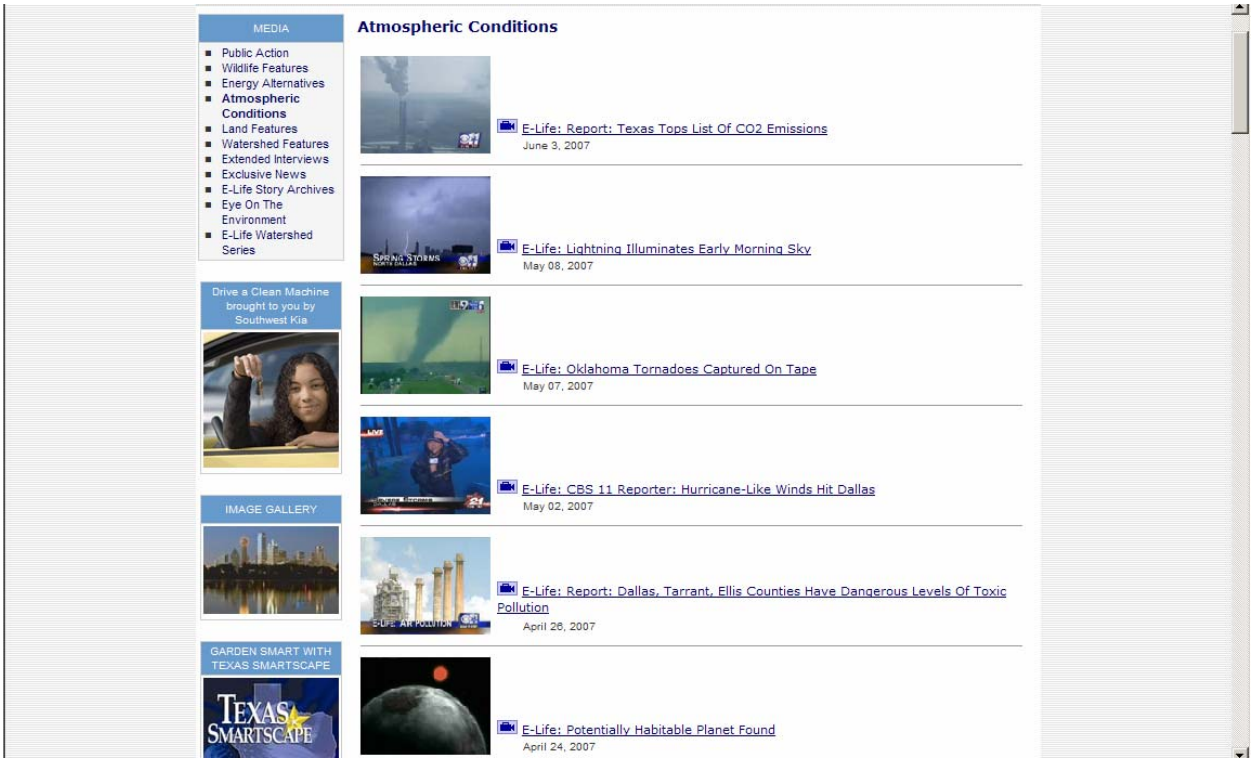
Appendix AK: Wildlife Features Web Page



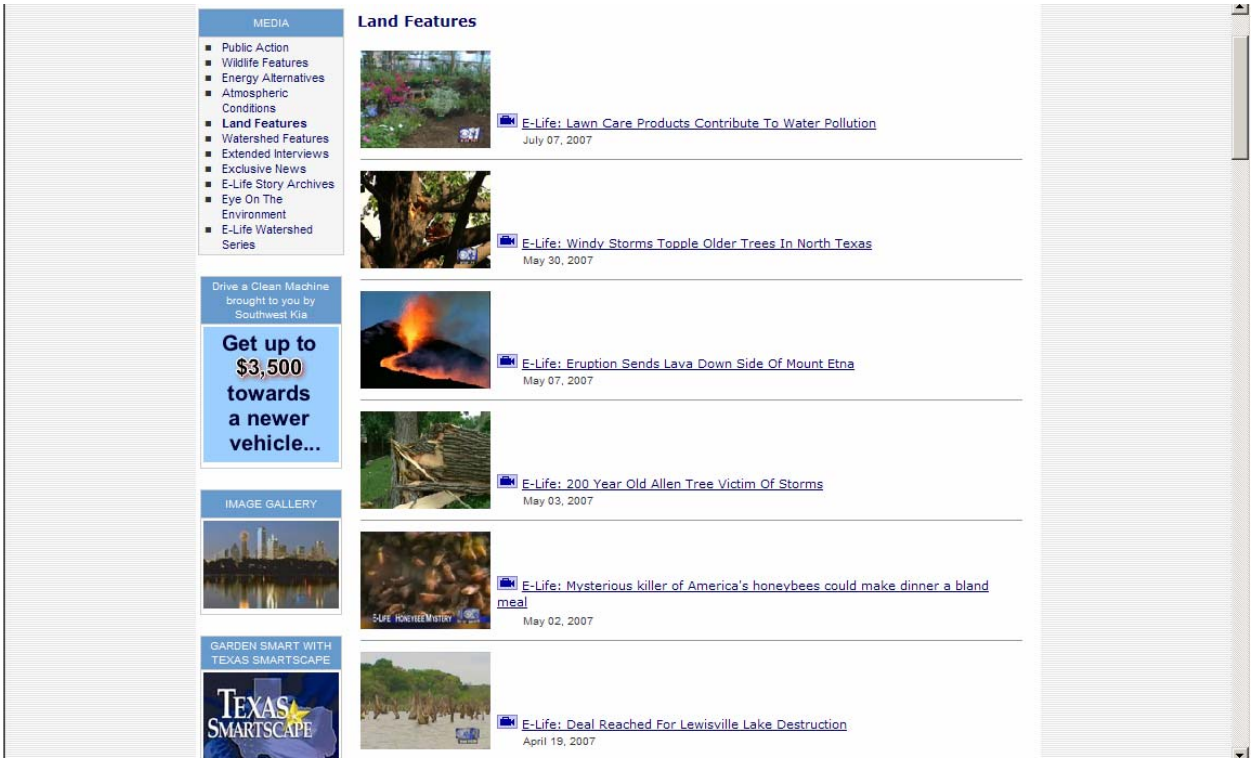
Appendix AL: Energy Alternatives Web Page



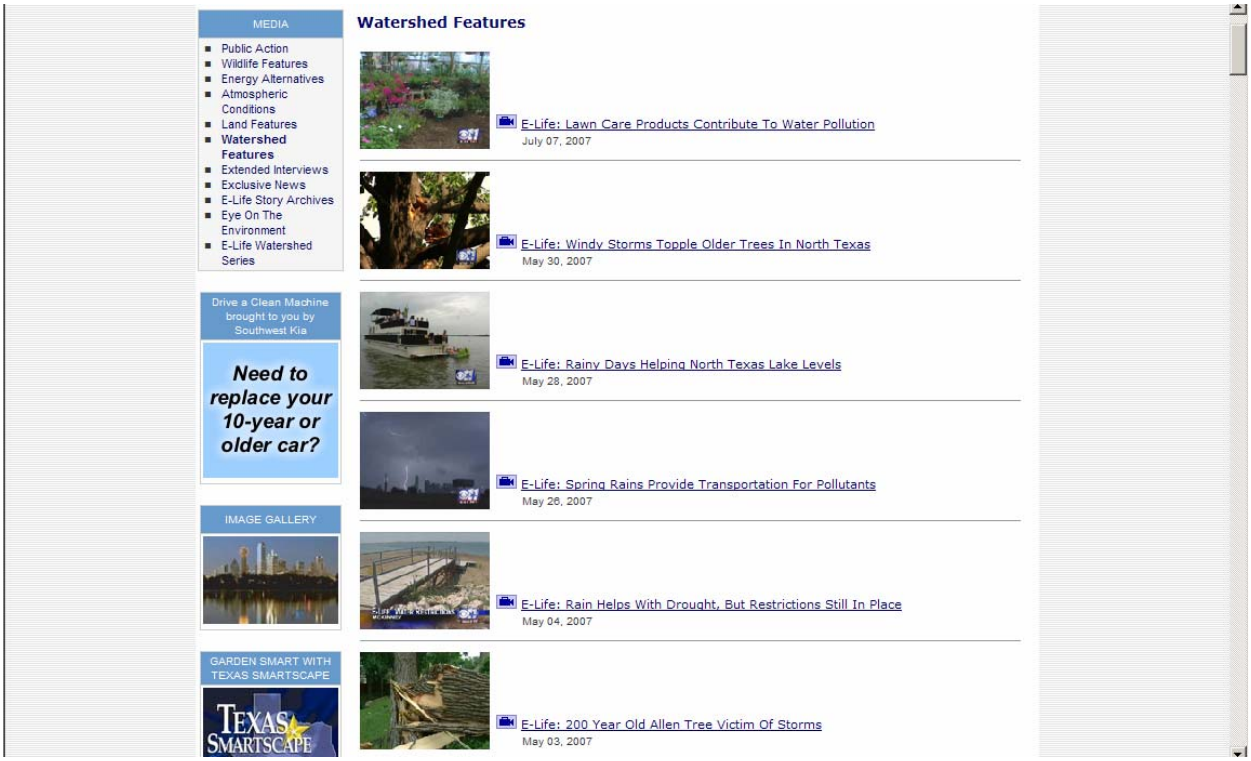
Appendix AM: Atmospheric Conditions Web Page



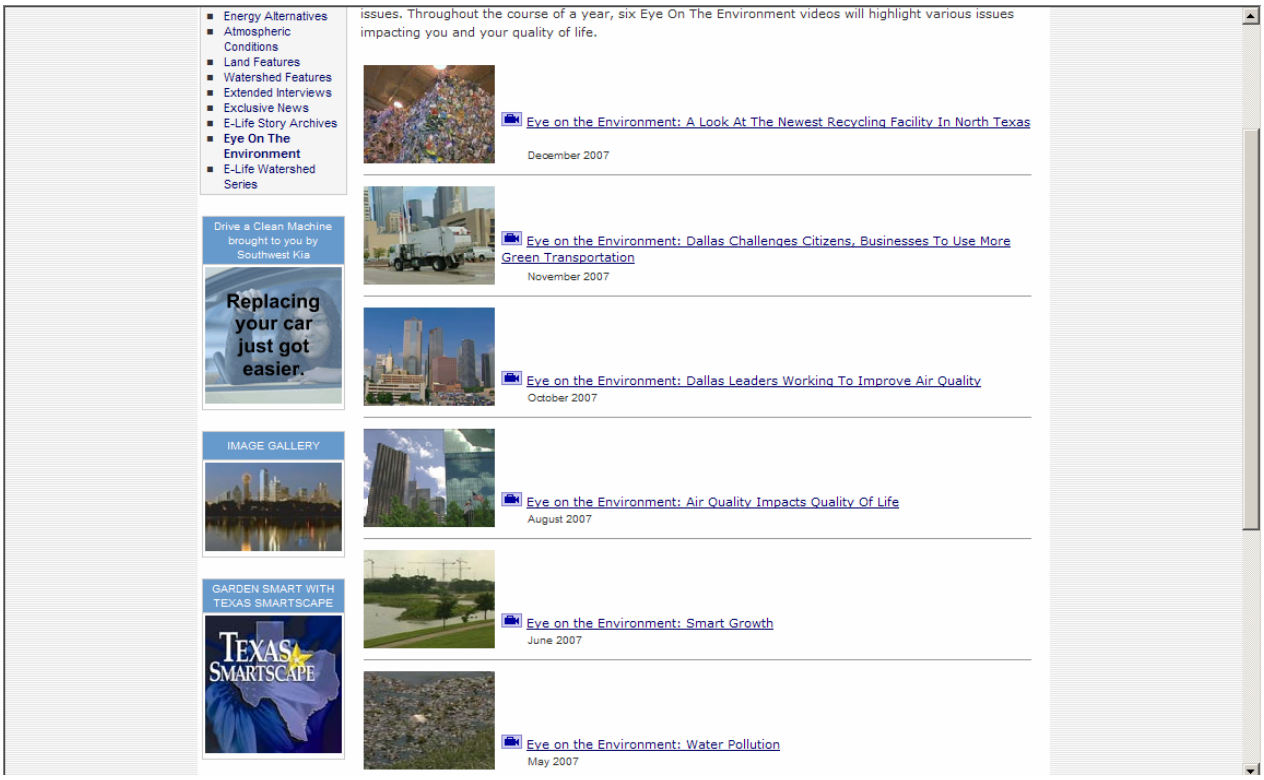
Appendix AN: Land Features Web Page



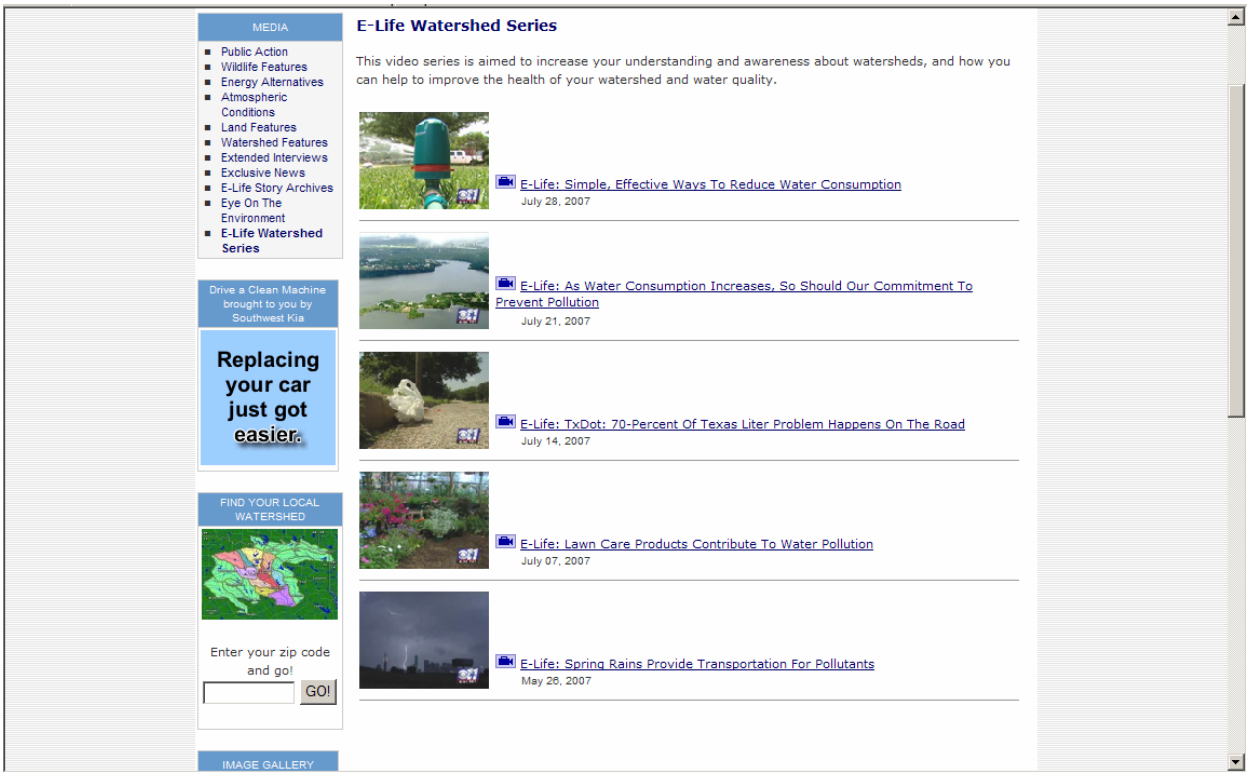
Appendix AO: Watershed Features Web Page



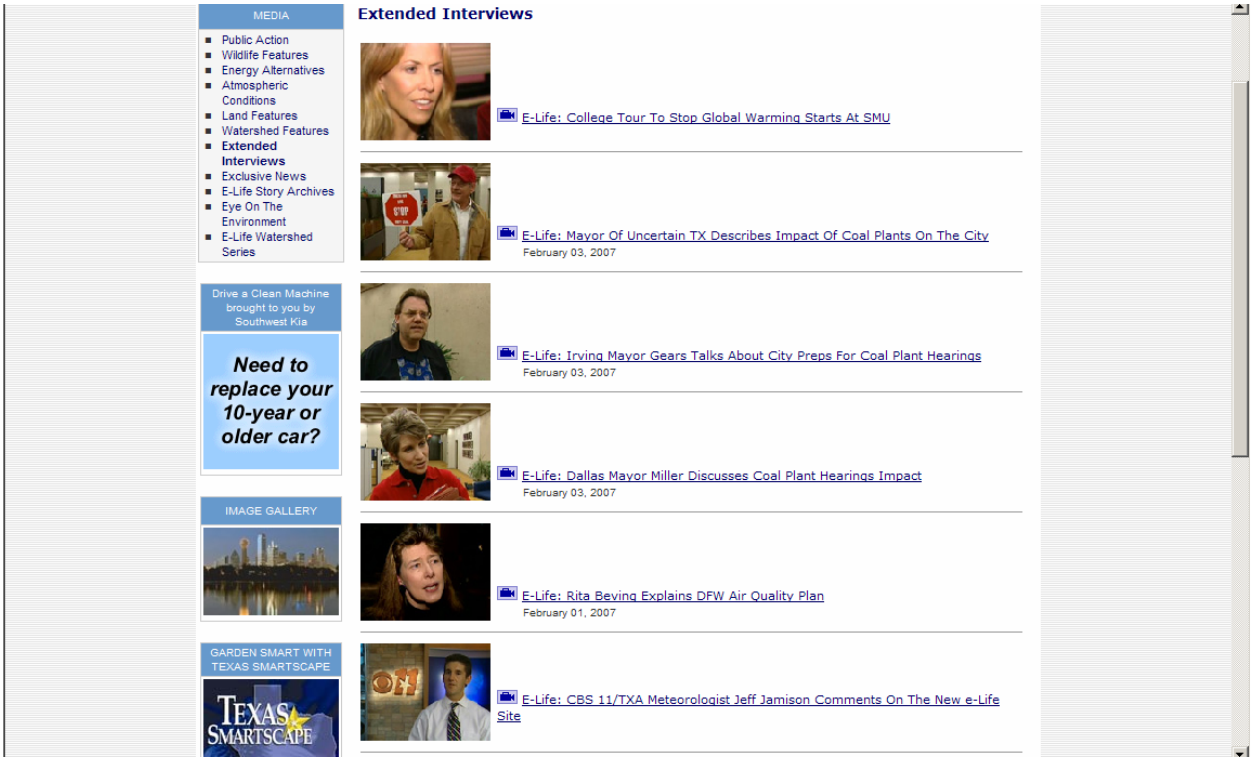
Appendix AP: Eye on the Environment Web Page



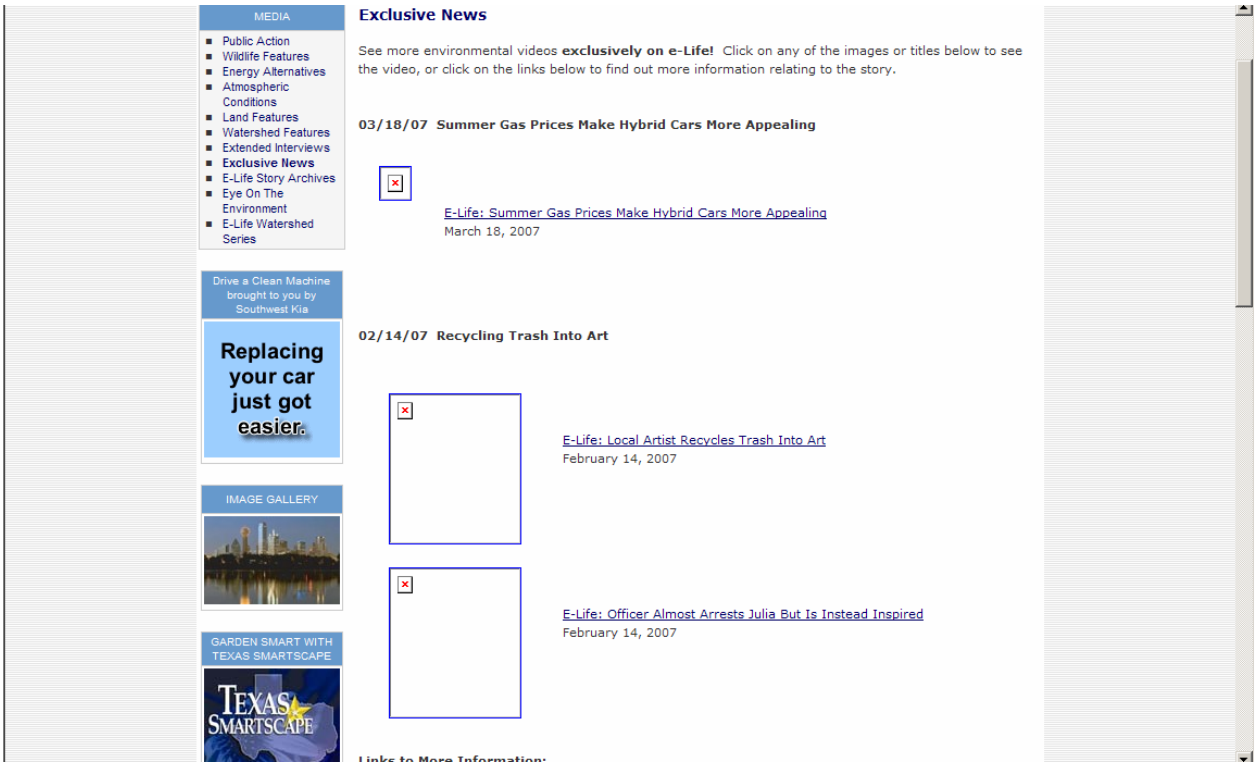
Appendix AQ: Watershed Series Web Page



Appendix AR: Extended Interviews Web Page



Appendix AS: Exclusive News Web Page



Appendix AT: Local Content Providers Network (LCPN) Roster

#	Last Name	First Name	Job Title	Agency
1	Albizu	Ramon	Storm Water Program Coordinator	City of Carrollton
2	Ashley	Richard	Director of Natural Science	River Legacy Foundation
3	Barton	Micah		City of McKinney
4	Bliss	Deb	Compost Education Coordinator	City of Plano
5	Burns	Fran	Trinity River Environmental Education Society	City of Haltom City
6	Caldwell	Ellen		EPA Region 6
7	Campbell-Husband	Sheri	Director of Community and Environmental Services	City of Burleson
8	Carter	Wanda	Office Manager	Parker County Soil and Water Conservation District #558
9	Chafin	Bianca	Environmental Services Manager	City of Burleson
10	Chaney	Steve	County Extension Agent	Texas Cooperative Extension
11	Christie	Linda	Community and Governmental Relations Director	Tarrant Regional Water District
12	Church	Clay	Public Affairs Specialist	USACE-Fort Worth
13	Clemens	Linda	Senior Environmental	City of Grand Prairie

			Specialist	
14	Corley	David	Environmental Manager	City of Arlington
15	Crisp	Jim	Environmental Specialist	TxDOT-Dallas
16	Crotty	Roni	Environmental Specialist/Educator	City of Arlington
17	Curran	Ed	President	REAL
18	Davis	John	Urban Biologist	Texas Parks and Wildlife Department
19	Dickson	Kenneth L.	Director	University of North Texas
20	Drake	Rohini		City of Plano
21	Escobar	Vanessa	Environmental Science Specialist	City of Irving
22	Gange	Michael	Assistant Director of Environmental Management	City of Fort Worth
23	Goddard	Sharon	Executive Director	Keep Carrollton Beautiful
24	Hansen	Heather	Environmental Management	University of Texas-Dallas
25	Harvey	Sophia	Senior Engineer Manager	City of Dallas
26	Henry	Randy	Public Affairs Specialist	USDA-NRCS
27	Horton	Bob	Keep Irving Beautiful Administrator	Keep Irving Beautiful
28	Hudson	Scott	Division Manager	City of Carrollton
29	Hunter	David	Watershed Protection Manager	City of Denton
30	Hylton	David	Water Education Coordinator	City of Frisco
31	Johnson	Brett	Urban Biologist	Texas Parks and Wildlife Department
32	Jones	Denyse	Environmental Coordinator	City of Dallas
33	Lamb	Brad	6WQ-EW	EPA Region 6
34	Marsicano	Judy	Public Affairs	USACE
35	Merchant	Heather	Environmental Education and Community Outreach Supervisor	City of Plano
36	Pierce	Jason	Manager of Public Information	Upper Trinity Regional Water District
37	Pierce	Kelli	Public Education Coordinator	City of Garland
38	Rattan	Gene	Environmental Specialist	Tarrant County
39	Redfearn	Howard	Storm Water Manager	City of Mansfield
40	Reeves	Lorrie	Water Education Coordinator	City of Plano
41	Reynolds	Debbie		EPA Region 6
42	Rush	Randall		EPA Region 6
43	Ryburn	David		Upper Trinity Regional Water District
44	Schutts	Alan	Chariman	Parker County SWCD
45	Schmidt	Mendie	Environmental Projects Specialist	City of Denton
46	Schwartz	Joseph	Storm Water Program Coordinator	City of Carrollton
47	Siddall	Karen	Drainage Programs Coordinator	City of Irving
48	Smart	Richard	Environmental Coordinator	City of Dallas
49	Smith	Larinda	Public Education Specialist	City of Fort Worth
50	Stadelman	John	Outreach Team, Water	EPA Regional 6
51	Sweeton	Susie	Public Education Coordinator	City of Fort Worth
52	Sweney	Melinda	Sustainability	City of Plano

			Communications Coordinator	
53	Tolar	Christopher		TxDOT-Dallas
54	Upton	Christi	Environmental Coordinator	City of Southlake
55	Vanhoozier	Amanda	Community Programs Supervisor	City of Coppell
56	Weaver	Lisa	Environmental Programs Coordinator	City of Lewisville
57	Wheeler	Brian	Associate Director Elm Fork Education Center	University of North Texas
58	Witte	Fran	Recycling Coordinator	City of Irving
59	Wolfe	Clint	Project Manager	Texas Water Resource Institute
60	Woodson	Dotty	Extension Program Specialist	Texas AgriLife Extension
61	Wythe	Kathy	Communications Coordinator	Texas Water Resources Institute
62	Yost	Ellen	Public Outreach Specialist	North Central Texas Council of Governments

Appendix AU: On-Line/On-Air Story Ideas Developed by the LCPN

#	**Story Idea**
1	Responsible boating highlighting water quality
2	Water conservation
3	Summer outdoor activities for families featuring local parks, nature centers etc.
4	Composting as a summer activity
5	Invasive species propagated through boating
6	Litter prevention
7	Trinity River Clean Up in Elm Fork River near Lewisville
8	Trinity Trash Bash Challenge Issued
9	Texas Arbor Day Poster Contest from the Texas Forest Service
10	Arlington's Smart Yard Contest
11	Clean Pools, Polluted Waters
12	Clean Cars, Dirty Creeks
13	Celebrate National Estuaries Day by Viewing EstuaryLive!
14	Texas Spinach Producers Working to Keep Product Safe from E. Coli
15	Technotrash Recycling at University of Arlington
16	Texas Drought Losses Estimated at $4.1 Billion
17	Bioenergy to be Focus of New Texas A&M System Alliance
18	Summertime Can Mean Blues for Lawns and Gardens
19	Fire Ant Awareness Week Helps Prevent Persistent Texas Pest
20	EPA kicks off regional ENERGY STAR Change a Light campaign
21	Trinity River Corridor Constructed Wetlands
22	$16.1 Million in Drought-Aid for Texas Livestock Producers
23	Texas Researchers Casting for Answers to Stop Algae Problem in Texas Lakes
24	Fort Hood Joins EPA Partnership, Pledges Mercury Reduction
25	Area Creek Studied for Rangeland Effects on Water Quality
26	Mulch Demo in McKinney
27	Truckers driving toward environmental excellence (EPA SmartWay)
28	New Boardwalk Offers Giant Step into Texas Native Forest
29	"The 2030 Challenge" for Zero Greenhouse Emissions to be Outlined in Arlington
30	Texas Cooperative Extension Releases Second Round of Phorid Flies to Combat Fire Ants
31	EPA enforcement actions in Texas cut pollution, restore environment
32	TCEQ and Texas Parks and Wildlife Department (TPWD) statewide fish tissue sampling

	project
33	Texas Parks and Wildlife Department receives Gulf Guardian Award for Coastal Expo
34	This Thanksgiving, Please Don't Feed the Storm Drain!
35	Deck the Halls, Not the Creeks!
36	Damage by Fire Ants in Rural Texas Estimated at $236.5 Million
37	Majority of Texas wildfires are human-caused
38	Communities Against Trash, Dallas Park and Recreation Department
39	World Wetlands Day featuring North Central Texas wetlands
40	Managing Urban Wildlife…*"Planning for Success"*
41	Topping Trees Can Be Deadly
42	Rains Bring Large Fish Kills in East Texas
43	Keep your green—in your yard and in your wallet—SmartScape®!
44	Environmental performance takes off at world's third busiest airport
45	Managing Urban Wildlife Becoming Critical in Growing Cities, Suburbs
46	EarthKind Rose of the Year
47	Weatherford considers wetlands to filter wastewater
48	Proper application of fertilizer
49	Proper car maintenance, such as car washing and disposing of used motor oil
50	Composting
51	Fishing
52	Proper discharge of swimming pool water
53	Fall planting season – choose SmartScape
54	This Holiday, Please Don't Feed the Storm Drain!
55	Composting leaves
56	Winterizing your equipment (lawn mowers, boats, etc.)
57	Available outreach templates
58	Flooding-related safety issues in the Upper Trinity River watershed and in general
59	Environmentally friendly ways to deal with mosquitoes
60	Proper application of pesticides to minimize runoff in storm water
61	Ways homeowners can ensure that landscapers and yard care companies they hire use proper techniques to minimize NPS pollution
62	How animals and insects benefit from wet weather conditions
63	The benefits of rain gardens/rain harvesting on storm water quantity and quality
64	Urban populations of white-winged doves/white-winged dove banding
65	Water quality in construction site runoff
66	Need to check automatic sprinkler systems after a power outage to avoid wasting water
67	Implementation of a water reuse system at a municipal water district in the Upper Trinity River watershed
68	Green building initiatives and advances
69	Installation and testing of green roof technologies at a college in the Upper Trinity River watershed
70	Construction and demolition recycling efforts by cities in the Upper Trinity River watershed
71	Understanding the watershed's reservoir system and defining related vocabulary
72	Impacts of sanitary sewer overflows on water quality in the Upper Trinity watershed
73	The benefits of water on native habitats/aquatic wildlife
74	The transportation of trash and debris on the ground through storm water
75	Movement patterns of fire ants following rainfall events
76	Unmaintained pools can be grounds for mosquito breeding
77	Keep pool water from becoming a storm water pollutant
78	University of Texas at Arlington's solid waste award
79	Water conservation
80	Results of the annual Trash Bash
81	Green businesses
82	Benthic monitoring to help determine water quality

83	Christmas tree recycling
84	Proper way to dispose of used turkey grease to avoid sewer overflows and water pollution
85	Winterizing your garage and how to properly dispose of unwanted chemicals
86	Protecting your car this winter—and protect our region's waters
87	Performing an energy audit
88	How to offset your holiday activities
89	The effect of throwing wrapping paper in the fireplace
90	Recycle wrapping paper and other gift accessories
91	How to be "green" while hunting
92	How to dispose of your pumpkin
93	Rather than throwing out fake trees find a way to use pieces of it in homemade crafts
94	Deadheading flowers in the winter gets rid of a major source of food for birds
95	Be selective about where you rake—leaf litter provides a home for skinks
96	"Green" gift ideas for the holidays
97	How to have an environmentally-friendly Super Bowl party
98	How to live green in 2008- "It's easy being green"
99	Stress on water tanks during half-time of Super Bowls
100	Make a pledge to bring your lunch at least once a week
101	In the dead of winter you don't need to water your lawn
102	How to avoid spreading bird diseases through bird feeders
103	Do-it yourself compost
104	Buy LED Christmas lights for next year
105	UTA's green roof
106	Explain the difference between a bobcat and a mountain lion
107	"Binging Birds"
108	Trout stock update
109	Dallas' green initiative to "building a greener city"
110	The delisting of an urban lake (Fosdic Lake) in Fort Worth from the 303(d) list of impaired water bodies
111	Sierra Club's initiative on "Cool Cities"—cities taking action against Global Warming
112	Texas SmartScape® Month activities occurring throughout the region
113	Water conservation planning and sediment control
114	Heating water is a large expense in the home—how much energy does it take to transport heat?
115	Great American Cleanup related events occurring across the region
116	Earth Day/Arbor Day events occurring across the region
117	LEED certification
118	New green building initiatives
119	The benefits of trees (on storm water, energy use, etc.)
120	e-Life's impact on the region

Appendix AV: On-Line ENS Web Page

June 10, 2007	Students and Teachers Earn an A Grade in Water Quality
June 03, 2007	Two North Texas Cities Receive Prestigious Environmental Accolade: Governor's Community Achievement Award
May 28, 2007	Electronics Recycling Bill Clears The Texas State Legislature Without A Dissenting Vote
May 23, 2007	Green Lawn, Healthy Environment
May 10, 2007	North Texas Drought Continues Despite Recent Rainfall
May 06, 2007	Border Fence To Be Built On Wildlife Refuges
April 19, 2007	Deal Reached For Lewisville Lake Destruction
April 04, 2007	Sustainable Land Management for Small Land Owners
March 28, 2007	Activists Successful In Stopping What Some Call The TXU "Coal Rush"
March 12, 2007	Old is New Again in the Recently Named 'EarthKind Rose of the Year'
February 27, 2007	Keep your green—in your yard and in your wallet—SmartScape®!
February 18, 2007	World Water Day 2007
February 08, 2007	Topping Trees Can Be Deadly
January 28, 2007	World Wetlands Day 2007
January 02, 2007	Majority of Texas Wildfires are Human-Caused
December 26, 2006	Christmas Tree-Cycling in North Texas
December 19, 2006	Deck the Halls, Not the Creeks!
December 14, 2006	Your Guide to a Green Holiday
December 07, 2006	Don't Bag It!
November 28, 2006	Prevent Sprinkler Hazards During Freezing Weather
November 19, 2006	This Thanksgiving, Please Don't Feed the Storm Drain
November 12, 2006	Texas Recycles Day
October 25, 2006	Trinity River Wetlands Restored in Dallas
October 10, 2006	The Value of Trees
October 02, 2006	Need a Bright Idea? Here's One!
September 24, 2006	Your Landscaping Dollars…Down the Drain
August 30, 2006	Laboring to Keep Cars & Creeks Clean
August 23, 2006	Stop Illegal Dumping
August 15, 2006	Clean Pools, Polluted Waters

Appendix AW: On-Line ENS

#	Date	ENS
1	April 20, 2006	Sustaining Our Environmental Life (E-Life)
2	April 26, 2006	Your Dog's Waste Could be an Environmental Hazard
3	May 8, 2006	Lewisville Lake Environmental Learning Area Reopens!
4	May 16, 2006	Responsible Boating for a Clean and Healthy Environment
5	May 29, 2006	Got Drought? SmartScape! Tips for Outdoor Water Conservation
6	June 6, 2006	For Worth Prairie Park Home to Native Wildlife
7	June 8, 2006	North Texas Motor Oil Recycling Efforts
8	June 22, 2006	Mulch and Compost Makes Cents at Home
9	June 27, 2006	Celebrate America the Beautiful by Keeping 4th of July Picnics Litter Free!
10	August 2, 2006	Going Green While Remaining Affordable
11	August 13, 2006	Energy Certificates
12	August 15, 2006	Clean Pools, Polluted Waters
13	August 23, 2006	Stop Illegal Dumping
14	August 30, 2006	Laboring to Keep Cars and Creek Clean
15	September 24, 2006	Your Landscaping Dollars…Down the Drain
16	October 2, 2006	Need a Bright Idea? Here's One!
17	October 10, 2006	The Value of Trees
18	November 12, 2006	Texas Recycles Day
19	November 19, 2006	This Thanksgiving, Please Don't Feed the Storm Drain
20	November 28, 2006	Prevent Sprinkler Hazards During Freezing Weather

21	December 7, 2006	Don't Bag It!
22	December 14 2006	Your Guide to a Green Holiday
23	December 19, 2006	Deck the Halls, Not the Creeks!
24	December 26, 2006	Christmas Tree-Cycling in North Texas
25	January 02, 2007	Majority of Texas Wildfires are Human-Caused
26	January 28, 2007	World Wetlands Day 2007
27	February 08, 2007	Topping Trees Can Be Deadly
28	February 18, 2007	World Water Day 2007
29	February 27, 2007	Keep your Green—in Your Yard and in Your Wallet—SmartScape®!
30	March 12, 2007	Old is New Again in the Recently Name 'EarthKind Rose of the Year'
31	March 28, 2007	Activists Successful in Stopping What Some Call the TXU "Coal Rush"
32	April 4, 2007	Sustainable Land Management for Small Land Owners
33	April 19, 2007	Deal Reached for Lewisville Lake Destruction
34	May 6, 2007	Border Fence to be Built on Wildlife Refuges
35	May 10, 2007	North Texas Drought Continues Despite Recent Rainfall
36	May 23, 2007	Green Lawn, Healthy Environment
37	May 28, 2007	Electronics Recycling Bill Clears the Texas State Legislature without a Dissenting Vote
38	June 3, 2007	Two North Central Texas Cities Receive Prestigious Environmental Accolade: Governor's Community Achievement Award
39	June 10, 2007	Students and Teachers Earn an A Grade in Water Quality
40	June 17, 2007	State Agency Approves Permit for TXU Coal Plant
41	June 25, 2007	Take Care of Texas
42	July 1, 2007	Corps of Engineers encourages public to call ahead before visiting lakes
43	July 8, 2007	After the Storm
44	July 15, 2007	Help Stop Illegal Dumping in North Central Texas
45	July 22, 2007	Local Groups Can Adopt-a-River
46	July 29, 2007	Ozone is a Pollutant of Concern in the DFW Metroplex
47	August 5, 2007	White-winged Doves Flocking to the DFW Metroplex
48	August 12, 2007	Smart Growth for North Texas
49	August 19, 2007	Give Your Creek a Check-up
50	August 26, 2007	What should you know about your lawn care company?
51	September 2, 2007	Storm drain for rain—not pool water
52	September 9, 2007	Wetlands Will Help Texans Reuse Treated Wastewater
53	September 16, 2007	Take the Next Step in Pollution Prevention
54	September 23, 2007	Blobs Found in Lakes are a Sign of Good Water Quality
55	September 30, 2007	Let it Rain
56	October 14, 2007	"Eco-shop" 'til You Drop
57	October 21, 2007	Buildings are Going Green in North Central Texas
58	October 28, 2007	How to Have a Green Halloween
59	November 4, 2007	Trash Bash Volunteers Really Pick Up, Challenge Winners Announced
60	November 11, 2007	North Texas Recycles 15.8% of Solid Waste
61	November 19, 2007	Be Smarter Than the Turkey You're Frying!
62	December 2, 2007	Is There a Skink in Your Yard?
63	December 10, 2007	Protect Your Car This Winter—and Protect Our Region's Waters
64	December 16, 2007	12 Ways to Reduce Your Holiday Waste
65	January 2, 2008	Christmas Tree-Cycling in North Texas
66	January 11, 2008	EPA Launches National Radon Action Month
67	January 20, 2008	North Dallas Communities Benefit from NRCS Dam Rehabilitation

		Projects
68	January 30, 2008	Do Your Part—Party Smart!
69	February 10, 2008	Is Your City a “Cool City”?
70	February 11, 2008	Green Gifts for Valentine’s Day
71	February 24, 2008	Don’t Let Pollution Spoil Your Weekend Fun
72	February 29, 2008	Be Bloomin’ Creative, Plant Native!
73	March 9, 2008	Water Quality Project Works to Improve Cedar Creek
74	March 23, 2008	North Texans Urged to “Fight Dirty”
75	April 2, 2008	It’s Easy Being Green
76	April 11, 2008	DOO the Right Thing!
77	April 18, 2008	Give a Gift that Keeps on Giving!

Appendix AX: Watershed Series Vignettes

#	Date	Vignette
1	May 26, 2007	Spring Rains Provide Transportation for Pollutants
2	July 7, 2007	Lawn Care Products Contribute to Water Pollution
3	July 14, 2007	TxDOT: 70-Percent of Texas Litter Problem Happens on the Road
4	July 21, 2007	As Water Consumption Increases, So Should Our Commitment to Prevent Pollution
5	July 28, 2007	Simple, Effective Ways to Reduce Water Consumption

Appendix AY: Eye on the Environment Series Vignettes

#	Date	Vignette
1	May 2007	Water Pollution
2	June 2007	Smart Growth
3	August 2007	Air Quality Impacts Quality of Life
4	October 2007	Dallas Leaders Working to Improve Air Quality
5	November 2007	Dallas Challenges Citizens, Businesses to Use More Green Transportation
6	December 2007	A Look at the Newest Recycling Facility in North Texas
7	January 2008	Dallas Recycles Residents’ Sensitive Documents

Appendix AZ: On-Air ENS

#	Date	ENS
1	April 2006	CBS 11/TXA Meteorologist Jeff Jamison Comments on the New e-Life Site
2	April 2006	CBS 11/TXA 21 President and General Manager Steve Mauldin Comments on the New e-Life Site
3	April 2006	Regional Administrator for EPA Region 6 Richard Greene Comments on the New e-Life Site
4	April 20, 2006	E-Life promotional video
5	April 20, 2006	Your Dog’s Waste Could Be An Environmental Hazard
6	April 27, 2006	DFW Fails Air Quality Report
7	May 1, 2006	You can help improve air quality
8	May 1, 2006	New Fort Worth Eco-Friendly Buses
9	May 4, 2006	Energy House
10	May 4, 2006	Doggie Doo
11	May 5, 2006	EPA Fines Dallas

12	May 5, 2006	Lewisville Lake Environmental Learning Area
13	May 8, 2006	Nation's worst pollution plant
14	May 9, 2006	Biodiesel
15	May 11, 2006	Wind Farm
16	May 11, 2006	Water Treatment
17	May 12, 2006	EPA Award
18	May 16, 2006	Tree City
19	May 18, 2006	Lake Levels
20	May 19, 2006	Watering Ban
21	May 30, 2006	Water Woes
22	June 1, 2006	Water Restrictions
23	June 5, 2006	Prairie Lands
24	June 5, 2006	EPA Fines Dallas
25	June 5, 2006	Lewisville Lake Environmental Learning Area
26	June 5, 2006	Prairie Lands
27	June 7, 2006	DFW Red Alert
28	June 7, 2006	Ethanol Fuel
29	June 9, 2006	Saving Fuel
30	June 13, 2006	Wildlife Refuge
31	June 16, 2006	Grapevine Drought
32	June 21, 2006	Texas Air Quality
33	June 22, 2006	Global Warming
34	June 23, 2006	Blue Skyways
35	June 26, 2006	Water Level Woes
36	June 28, 2007	Drought Affects Businesses
37	June 29, 2006	Bobcats
38	July 1, 2006	Global Warming
39	July 2, 2006	Global Warming and Allergies
40	July 4, 2006	The Impact of Litter
41	July 5, 2006	Fort Worth Water Quality Report
42	July 5, 2006	Scattered Showers Won't Help North Texas Drought
43	July 6, 2006	Lake Worth Toxic Chemicals
44	July 14, 2006	Water Strategy For Growing Population
45	July 14, 2006	Heat and Health
46	July 18, 2006	North Texas Free Transit Day
47	July 18, 2006	First Texas Ethanol Plant
48	July 19, 2006	Fort Worth Neighborhood Water Patrol
49	July 19, 2006	Plano Smelly Water
50	July 19, 2006	Hybrid Delivery Trucks
51	July 20, 2006	Texas Drought Statistics
52	July 20, 2006	Energy Efficient House
53	July 21, 2006	Rainbow Trout Spawning In North Texas
54	July 25, 2006	Texas is #1 in Wind Energy Production
55	July 26, 2006	Texas Governor Proposes Park Budget Cuts
56	August 1, 2006	Dallas County May Declare Heat Emergency
57	August 2, 2006	Drought Affecting Tarrant County Lakes
58	August 2, 2006	Changes Coming to Dallas Recycling Program
59	August 2, 2006	Treated Wastewater Helps With Water Conservation
60	August 3, 2006	Governor Perry Gives Money to Biotechnology and Life Sciences
61	August 4, 2006	Water Restrictions vs. Homeowners Associations
62	August 13, 2006	Neutralizing Your Environmental Impact
63	August 14, 2006	Drought Taking Toll on Texas Businesses
64	August 14, 2006	Energy Certificate

65	August 15, 2006	McKinney Builds Environmentally 'Green' School
66	August 18, 2006	Illegal Tire Dump Aggravates Neighbors
67	August 18, 2006	Farmers Feel The Heat of North Texas Drought
68	August 21, 2006	High Temperatures Taking Toll on Texas Trees
69	August 21, 2006	University of Texas-Arlington Receives Environmental Award
70	August 21, 2006	Irving Schools Have Recycled Over 1 Million Pounds of Trash
71	August 21, 2006	Water Woes in Weatherford
72	August 22, 2006	Local Fishermen Feeling Effects of Texas Drought
73	August 23, 2006	Drought Affecting Texas Honey Bee Production
74	August 24, 2006	Pluto Is No Longer A Planet
75	August 24, 2006	Committee Urges Austin to Repair Deteriorating State Park System
76	August 24, 2006	Texas Heat Drying Up Lakes & Scorching Land
77	August 25, 2006	Texas Heat Forces Partial Closure of Lake Arlington
78	August 25, 2006	Dry Weather Causing Foundation Problems
79	August 25, 2006	Wildfire in Caddo, Texas
80	August 29, 2006	Trinity River Trash Bash Bet
81	August 30, 2006	McKinney Businesses Working to Improve Environment
82	August 30, 2006	2006 Citrus Crop Smaller Than Expected
83	August 30, 2006	Crop Assistance for Drought Stricken Counties
84	September 5, 2006	Perry Promises Money To Help Trinity River Quality
85	September 6, 2006	TX Ag Department Awarding Grants to Urban Schools
86	September 7, 2006	Mushrooms Signal Coming of Fall Season
87	September 7, 2006	Fry to Fuel Program Making Impact on North Texas
88	September 7, 2006	SMU Builds Environmentally Friendly Building
89	September 8, 2006	The Cost of This Summer's North Texas Drought
90	September 9, 2006	State Money for Trinity River Environmental Restoration Project
91	September 14, 2006	Ice Melting
92	September 15, 2006	Fort Worth Gateway Park Gets a Facelift
93	September 19, 2006	Fort Worth Leaders Propose Tree Ordinance Changes
94	September 21, 2006	North Texas Restaurants Turned Fry Oil Into Fuel
95	September 22, 2006	North Texas Counties Reporting Cases Of Rabies In Bats
96	September 25, 2006	Dallas Co. Expanding Vehicle Emissions Program
97	September 25, 2006	New Orleans Superdome Reopens
98	September 28, 2006	Oregon Supporters Relocate Eagle's Nest
99	September 28, 2006	Ongoing Texas Drought Hurting Hunting Industry
100	September 28, 2006	Department of Agriculture Offers Assistance to Ranchers
101	October 2, 2006	Governor Perry Unveils 'Wind Farm' Initiative
102	October 3, 2006	Are Your Kids Breathing Dirty Air?
103	October 4, 2006	Deer Hunting Near Houses Worries Homeowners
104	October 8, 2006	State of Texas Still Battling Wildfire Danger
105	October 9, 2006	Dallas and Fort Worth Working to Clean Air
106	October 10, 2006	Rainfall Does Little For North Texas Drought
107	October 10, 2006	Toxic Golden Algae Bloom Kills Texas Fish
108	October 11, 2006	Low Lake Levels in North Texas Becoming Hazardous
109	October 16, 2006	How Probable Is an Earthquake In Texas?
110	October 17, 2006	Dallas/Fort Worth Trends Add To Population Growth
111	October 17, 2006	Plan to Stop Deer Invasion Sparks Controversy
112	October 18, 2006	Low Lake Levels Hindering North Texas Development
113	October 19, 2006	Scientists: Ozone Hole Has Depleted
114	October 20, 2006	Applications for Livestock Assistance Grants Must Be Postmarked By November 13
115	October 23, 2006	National And Fort Worth Recycling Trends Reflect Good News For The Earth
116	October 24, 2006	Frisco Fighting Over New Park

117	October 30, 2006	Trinity Trash Bash Results
118	October 31, 2006	Leaf Blowers May Be Bad For The Environment
119	November 1, 2006	TX Natural Gas Companies Conserving Water
120	November 1, 2006	The US Green Building Council Takes On The "2030 CHALLENGE"
121	November 2, 2006	Thieves Stealing Water From Fort Worth
122	November 3, 2006	Carpe Diem Participants Promote Trinity River Fun
123	November 11, 2006	Engineers Redirecting Trinity River In Dallas
124	November 13, 2006	City Of Irving Looking For Additional Water Source
125	November 14, 2006	Dallas May Have To Help Cities In Water Crisis
126	November 15, 2006	NASA Unveils First High-Def Video of Outer Space
127	November 16, 2006	New Trinity River Center Opens
128	November 18, 2006	North Texans Work To Keep Texas Beautiful
129	November 26, 2006	Hearings Slated For Proposed Coal-Fired Plants
130	November 28, 2006	TCU Purple Bike Program Hopes To Make People More Green
131	December 2, 2006	First Baptist Academy Receives Recycling Award
132	December 6, 2006	Counties Give Green Light For Energy Friendly Traffic Lights
133	December 6, 2006	Scientists Begin Nation Wide Survey On National Watersheds
134	December 13, 2006	Hedgehog Decline Inspires Woman To Create Hedgehog Haven
135	December 14, 2006	Fisherman Enjoy Rare Winter Fishing Treat
136	December 14, 2006	Judge Rules In Favor Of Texas Clean Air Coalition
137	December 27, 2006	Bush Administration Takes Action To Save Polar Bears
138	January 2, 2007	New Method Traps Trash On Trinity River
139	January 3, 2007	New Dallas Recycling Plan Helps Save Money, Planet
140	January 4, 2007	Officials Calling Continuing Severe Drought A Crisis
141	January 4, 2007	Crews Search For Source Of Crude Oil Spill
142	January 5, 2007	North Texans Work To Reduce Traffic, Pollution
143	January 7, 2007	Moose Fly Through The Air
144	January 8, 2007	Fort Worth State Rep. Lon Burnam Calls For End In “Energy Monopoly”
145	January 8, 2007	Drought Conditions Force Smelly Well To Reopen
146	January 9, 2007	Elephant Seals Arrive In Northern California
147	January 9, 2007	Gas Wells Exempt From Needed Water Regulations
148	January 9, 2007	Health concerns about massive mulch fire in Helotes, TX
149	January 11, 2007	Kennedale Wants To Tap Into Fort Worth's Water System
150	January 11, 2007	Texas Group Sues Over Water Sale Ban
151	January 11, 2007	Dallas Sues Agencies For Threatening Water Source
152	January 16, 2007	Winter Rain Raising Local Lake Levels
153	January 17, 2007	Helicopter Pilot Rescues Deer
154	January 21, 2007	Lake Arlington Benefits From Rain
155	January 22, 2007	Elderly Tree Sitters Attempt To Save Tree
156	January 23, 2007	2012 Days to 'Green Olympics'
157	January 23, 2007	Signs Of Global Warming Can Be Seen In New Orleans
158	January 24, 2007	Miller Says TXU's Coal Plant Plans Misleading
159	January 24, 2007	Scientists Unveil Global Warming Report
160	January 24, 2007	Proposed Coal Fire Plants Spark Alternative Energy Debate - Part 1
161	January 24, 2007	Proposed Coal Fire Plants Spark Alternative Energy Debate - Part 2
162	January 25, 2007	Discussion At The World Economic Forum About Climate Change
163	January 26, 2007	TXU Coal Plant Controversy Hitting Hollywood
164	January 27, 2007	Local Leaders to Shape Regional Development at Vision North Texas Workshop Jan. 27
165	January 29, 2007	Texas State Parks in Peril
166	January 29, 2007	Plano Addresses Their Plan For The 2030 Challenge

167	January 30, 2007	Polluted Oceans Poison Sea Animals
168	January 31, 2007	New Research Shows Health Risks Of Air Pollution
169	January 31, 2007	North Texans Send Message To Austin - Clean Our Air
170	February 1, 2007	Rita Beving Explains DFW Air Quality Plan
171	February 2, 2007	Report Coal Plant Trains Will Cause Problem
172	February 2, 2007	North Texas Growth Stressing Water Supplies
173	February 3, 2007	Orienteering Opens Up The Trinity Forest
174	February 3, 2007	Groups Discuss Proposed Coal Plants
175	February 3, 2007	Mayor of Uncertain TX Describes Impact of Coal Plants on the City
176	February 3, 2007	Irving Mayor Gears Talks About City Preps for Coal Plant Hearings
177	February 3, 2007	Dallas Mayor Miller Discusses Coal Plant Hearings Impact
178	February 8, 2007	Grand Prairie Fights Litter Problem
179	February 9, 2007	Arlington Makes New Efforts Towards Water Conservation
180	February 12, 2007	Loose Livestock Causing Problems For Wise County Deputies
181	February 13, 2007	People Held Responsible For Cutting 1000s Of Trees
182	February 14, 2007	Officer Almost Arrests Julia But Is Instead Inspired
183	February 14, 2007	Local Artist Recycles Trash Into Art
184	February 15, 2007	Local Landfill Reclaimed As Nat'l Audubon Center
185	February 15, 2007	State Senator Averitt Files Bill For More Funding For Clean Air Programs
186	February 16, 2007	TCU Professor Furnishes Entire Home With Trash
187	February 16, 2007	Eco Friendly Subdivision Being Built Near Downtown Dallas
188	February 19, 2007	TCU Students Forced To Park Their Cars And Walk
189	February 20, 2007	Tracking Air Pollution From Above
190	February 20, 2007	Judge Blocks Perry's Coal Plant Fast Track Order
191	February 21, 2007	Proposed Dallas Toll Road May Be Sunk
192	February 21, 2007	Coal Plant Hearings Delayed Until June 27
193	February 22, 2007	Tour Guide Makes Nature Accessible To Blind Students
194	February 22, 2007	Growing Number Of People Trying To Be 'Carbon Neutral'
195	February 22, 2007	Discovery Of New Planets Prompts Questions About Alien Life
196	February 22, 2007	Watching Weather Can Be A Cold And Lonely Job
197	February 25, 2007	New Dallas Library Environmentally Friendly
198	February 25, 2007	Officials Say 2006 Worst Drought Year For Texas Agriculture
199	February 26, 2007	How Will The TXU Buy Out Impact The Environment?
200	February 28, 2007	What's An Otter Doing In McKinney?
201	February 28, 2007	Severe Weather Lifesavers: What To Do In Car During Tornado
202	February 28, 2007	Forest Service Prepares For Untamed Fire Season
203	March 1, 2007	Italian Volcanic Island Erupts
204	March 1, 2007	Companies Go Green
205	March 1, 2007	DFW Airport Has Gone Green
206	March 1, 2007	Severe Weather Lifesavers: Tornado Safety At Work & School
207	March 1, 2007	Severe Weather Lifesavers: Tornado Safety In Your Home
208	March 1, 2007	Severe Weather Lifesavers: Flood Safety
209	March 2, 2007	Severe Weather Lifesavers: Lightning Safety
210	March 5, 2007	Dallas Zoo Welcomes New Titi Monkey
211	March 6, 2007	Designers Brainstorming Concepts For Trinity River Parkway
212	March 7, 2007	Plano Announces New Water Law Enforcement
213	March 7, 2007	More Than 1000 Fish Died In White Rock Lake
214	March 8, 2007	Waste Water Treatment Backup Creating Awful Smell In Roanoke
215	March 10, 2007	Fort Worth Zoo School Opens Children's Eyes & Minds to Wildfire
216	March 12, 2007	Some McKinney Residents Say TXU Butchered Trees
217	March 13, 2007	Kids Get Green Thumbs At Academy Of Blooming Fun
218	March 13, 2007	Young Girl Writes Commercial To Teach Kids About Water Conservation

219	March 13, 2007	Some Say Trinity River Has Too Many Ducks
220	March 14, 2007	Trinity River Activists Want Toll Road Plans Blocked
221	March 18, 2007	North Texans Learn To Keep Their Lawns Green
222	March 18, 2007	Summer Gas Prices Make Hybrid Cars More Appealing
223	March 19, 2007	Looking For The Best Place To Find Wildflowers?
224	March 21, 2007	German Polar Bear Cub Gaining Celebrity Status
225	March 22, 2007	UN: Largest Public Health Issue Is Lack Of Safe Drinking Water
226	March 23, 2007	Plano Changes Watering Rules to Help With Shortage
227	March 23, 2007	Wildfire Danger Awareness Month Starts In April
228	March 25, 2007	Zoo Officials Perform Ultrasound On Pregnant Elephants
229	March 25, 2007	Lubbock Tornado Caught On Video
230	March 29, 2007	San Francisco Banning Plastic Bags
231	April 2007	College Tour To Stop Global Warming Starts At SMU
232	April 3, 2007	Bon Jovi Helps Habitat For Humanity Build Eco Friendly Homes
233	April 4, 2007	Fisherman Say Giant Squid Invading California Shore
234	April 4, 2007	Coyote Wanders Into Chicago Quizno's
235	April 9, 2007	Sea Otters In Vancouver Now Famous For Holding Hands
236	April 19, 2007	Deal Reached For Lewisville Lake Destruction
237	April 20, 2007	EarthFest Showcases Environmental Initiatives Exhibits
238	April 22, 2007	North Texans Celebrate Earth Day
239	April 23, 2007	Caterpillars Invade Ellis County Town
240	April 24, 2007	Potentially Habitable Planet Found
241	April 24, 2007	Rare Borneo Rhino Captured On Video
242	April 26, 2007	Dallas, Tarrant, Ellis Counties Have Dangerous Levels Of Toxic Pollution
243	April 30, 2007	Turtle Born In Kansas Boy's Pocket
244	April 30, 2007	Deer Crashed Through New Jersey Salon Window
245	May 2, 2007	Mysterious killer of America's honeybees could make dinner a bland meal
246	May 2, 2007	CBS Reporter Struggles To Stand In FW Severe Weather
247	May 2, 2007	North Texas Weather Drowns Out Audio of CBS 11 Reporter
248	May 2, 2007	CBS 11's Mark Johnson Feels The Force Of Fort Worth Storms
249	May 2, 2007	CBS 11 Reporter: Hurricane-Like Winds Hit Dallas
250	May 2, 2007	CBS 11 Reporter: Rain Falling Sideways At Ballpark
251	May 3, 2007	200 Year Old Allen Tree Victim Of Storms
252	May 4, 2007	Rain Helps With Drought, But Restrictions Still In Place
253	May 7, 2007	Eruption Sends Lava Down Side Of Mount Etna
254	May 7, 2007	Oklahoma Tornadoes Captured On Tape
255	May 8, 2007	Lightning Illuminates Early Morning Sky
256	May 9, 2007	Scientists Plan 'Encyclopedia of Life'
257	May 10, 2007	Carrollton Students Working To Save Environment
258	May 11, 2007	Eco-Chic Weddings New Trend
259	May 21, 2007	Dallas Skyline Could Soon Be Dark Overnight
260	May 23, 2007	Wanted: Home For 2 North Texas Black Bears
261	May 28, 2007	Rainy Days Helping North Texas Lake Levels
262	May 30, 2007	Windy Storms Topple Older Trees In North Texas
263	May 31, 2007	Wayward Whales Appear To Have Returned Home
264	June 2, 2007	Texas Wins Bids For Wind Turban Testing Facility
265	June 3, 2007	Report: Texas Tops List Of CO2 Emissions
266	June 28, 2007	Texas Quickly Becoming Leading Source for Renewable Energy
267	November 12, 2007	Recycling Report: North Texas Recycles 15.8% of Solid Waste
268	November 12, 2007	FW Officials Create Plan To Reduce Pollution Caused By Railroad Junction
269	January 28, 2008	Fort Worth Students Save Beavers, Stop Flooding

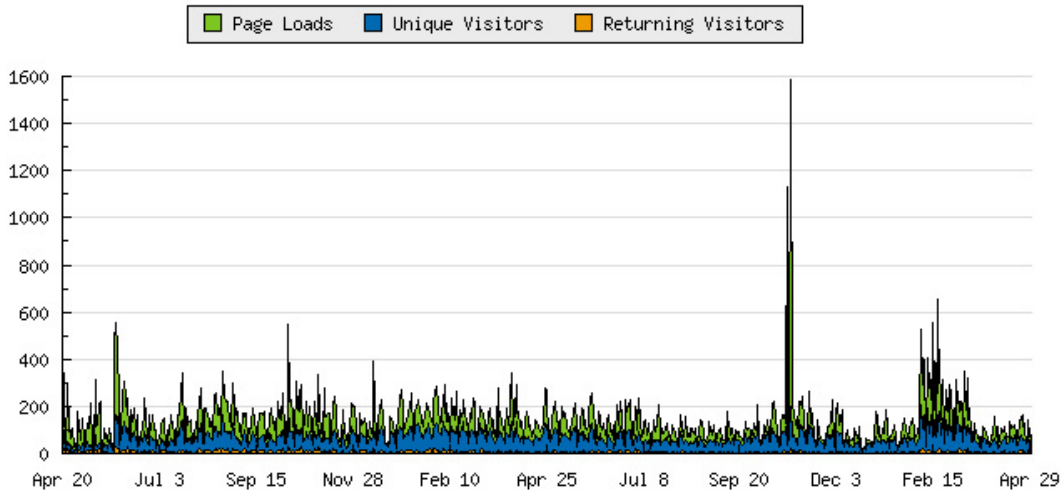
270	February 11, 2008	Code Enforcement Addressing Illegal Tire Dumping
271	March 15, 2008	Recycling Facility Upgrades Will Help Local Environment

Appendix BA: Project Promotion and Publication

#	Date	Promotional Feature/Item/Activity
1	April 2006	CBS/KTVT-11 News release announcing the e-Life project
2	April 6, 2006	Project kickoff with LCPN, CBS/KTVT-11, and StormCenter
3	April 18, 2006	Dave Jones, President & CEO of StormCenter, trained personnel of CBS/KTVT-11 on how to use, market, and promote e-Life
4	May 3, 2006	Presentation at "EPA-Getting in Step with Phase II"
5	May 10, 2006	Introduced e-Life to ~5000 students and teachers at the Kids Weather Day at Ameriquest Field in Arlington
6	June 2, 2006	Informational display at NCTCOG's Regional Assembly
7	July 20, 2006	Presentation at the Preston Trail Chapter of the Texas Society of Professional Engineers
8	September 15, 2006	Presentation at the Upper Trinity Water and Watershed Educators Workshop
9	September 22, 2006	Presentation at the McKinney Rotary Club
10	September 29-October 22, 2006	Live mentions of the e-Life project during the State Fair of Texas
11	October 6, 2006	Premier at CBS/KTVT-11 headquarters with over 40 people in attendance
12	October 23-25, 2006	e-Life display booth at the TSSWCB district directors meeting
13	October 23-25, 2006	e-Life informational handouts distributed to 30 local teachers who attended the WEFTEACH 06 at the WEFTEC Conference in Dallas
14	November 2, 2006	EPA Region 6 employee presentation
15	May 2007	e-Life article ("e-Life Partnership Celebrates First Birthday") published in NCTCOG's InsidER newsletter with circulation of ~1700 local government officials
16	June 2007	e-Life article ("Regional Projects Honored by TCEQ") published in NCTCOG's InsidER newsletter with circulation of ~1700 local government officials
17	November 2007	e-Life article ("e-Life Project with CBS-11 Going Strong") published in NCTCOG's InsidER newsletter with circulation of ~1700 local government officials
18	2006-2007	CBS/KTVT-11 on-air commercials using the e-Life promo pieces
19	2006-2007	CBS/KTVT-11 on-air mentions of e-Life in scrolling banners during news broadcasts
20	February-September 2007	CBS/KTVT-11 monthly electronic e-Life newsletter distributed to approximately 91 subscribers
21	May 2008	e-Life article ("Successful e-Life Project Spurs Regional Environmental Coverage") published in NCTCOG's InsidER (now InSight) newsletter with circulation of ~1700 local governmental officials.
22	2006-2008	Provided updates at the Regional Storm Water Management Coordinating Council quarterly meetings
23	2006-2008	Posting of e-Life related events on the on-air Community Calendar feature of CBS/KTVT-11 and KTXA-21
24	2006-2008	CBS/KTVT-11 on-air mention of the project website at the end of each on-air ENS
25	2006-2008	Project information website linked to NCTCOG's storm water homepage
26	2006-2008	The on-line banner display of the e-Life logo was presented as a

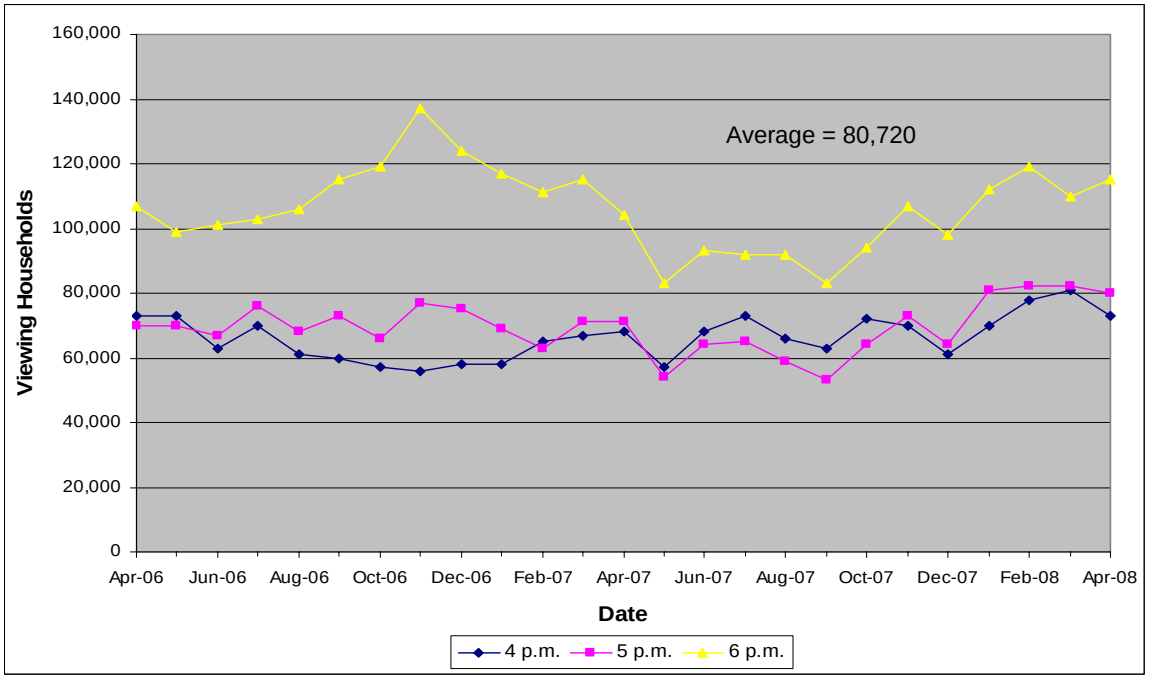
		hot spot on NCTCOG's Environment and Development homepage
27	2006-2008	News clips, web postings/links, poster and handout templates, newsletters, etc. through LCPN and other stakeholders

Appendix BB: e-Life Website Statistics (April 20, 2006 to April 30, 2008)

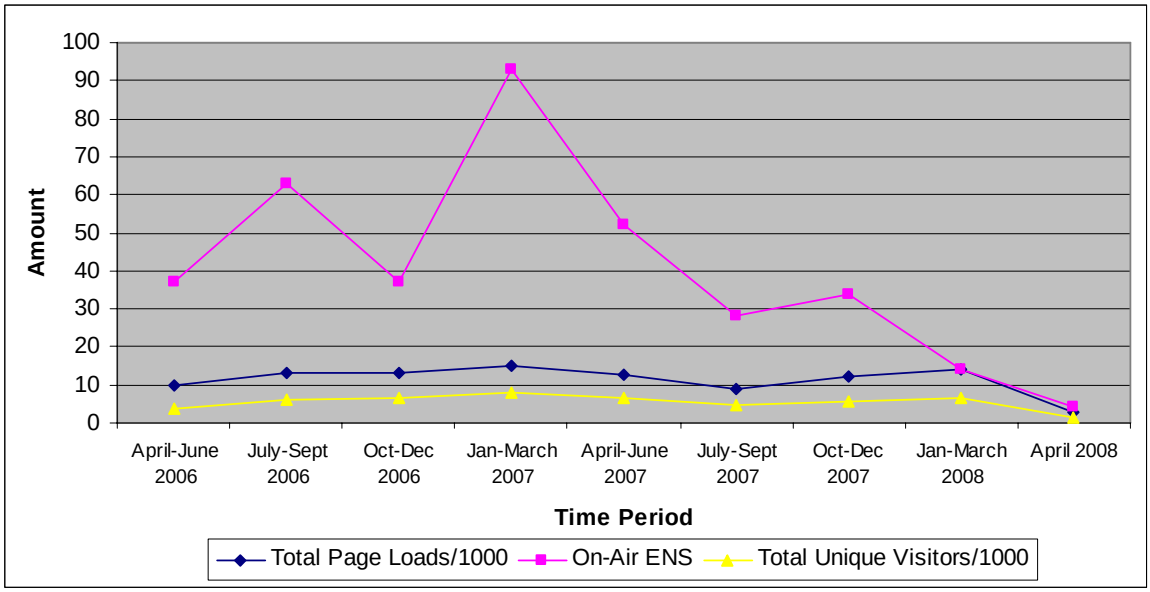


	Page Loads	Unique Visitors	First Time Visitors	Returning Visitors
Total	101,557	49,757	44,439	5,318
Average	137	67	60	7

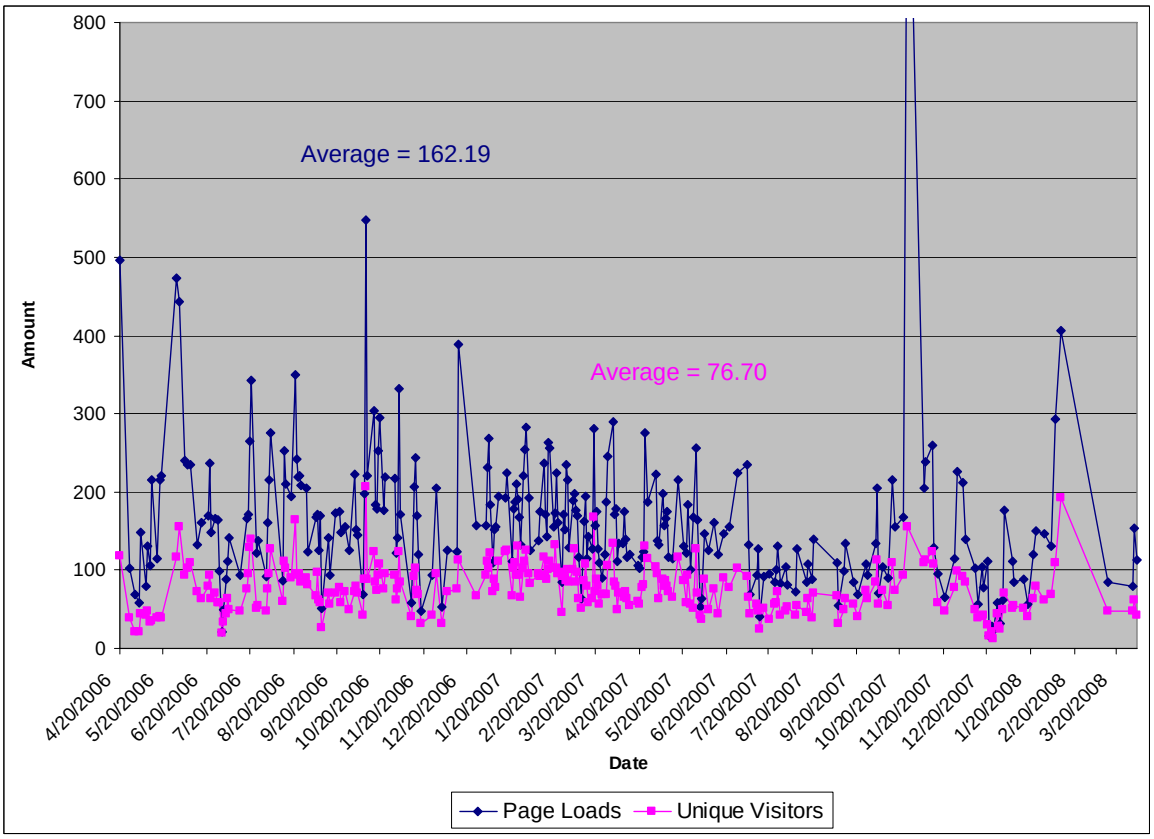
Appendix BC: CBS/KTVT-11 Evening News Ratings (April 2006 to March 2008) (Nielson Media Research)



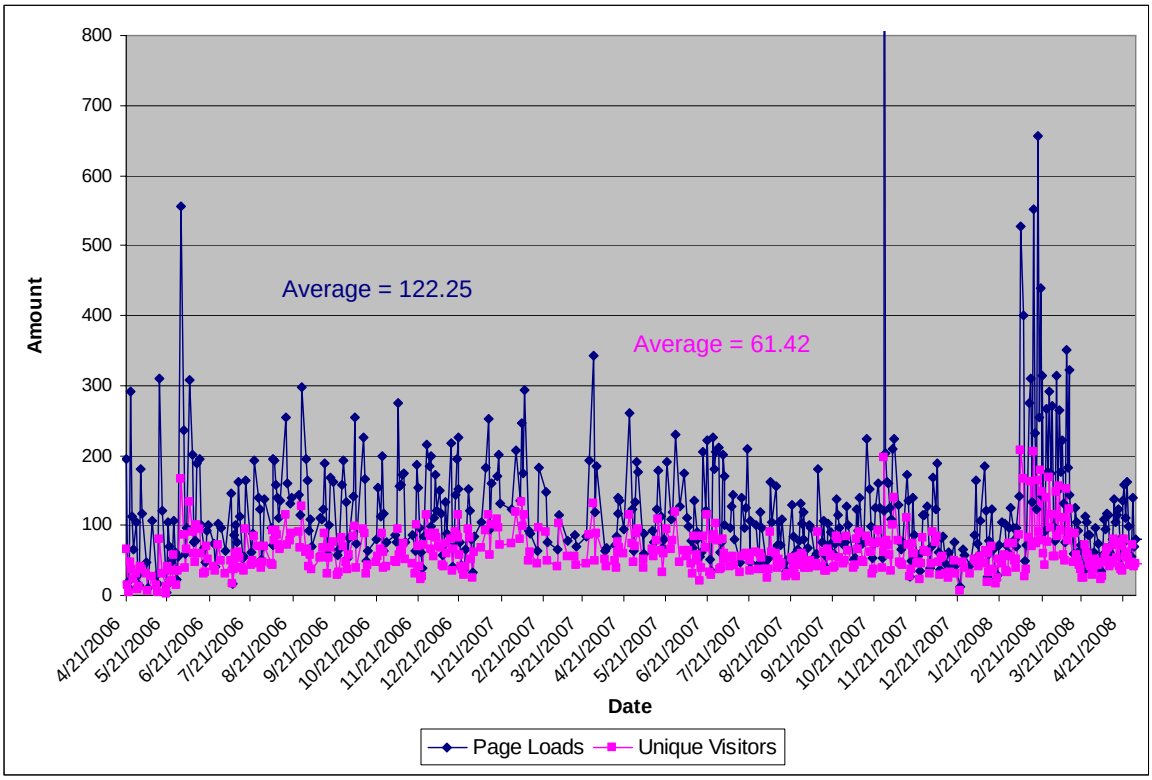
Appendix BD: Web Site Statistics and Number of On-Air ENS per Quarter.



Appendix BE: Web Site Statistics for Days When an ENS is Aired.



Appendix BF: Web Site Statistics for Days When an ENS is Not Aired.



ATTACHMENTS

Attachment A: Learning Center Interactive Graphics

Attachment B: Flyovers of the West Fork and East Fork Watersheds

Attachment C: LCPN Meeting Summaries

Attachment D: On-line ENS

Attachment E: On-air ENS

Attachment F: Watershed Series Vignettes

Attachment G: Eye on the Environment Series Vignettes