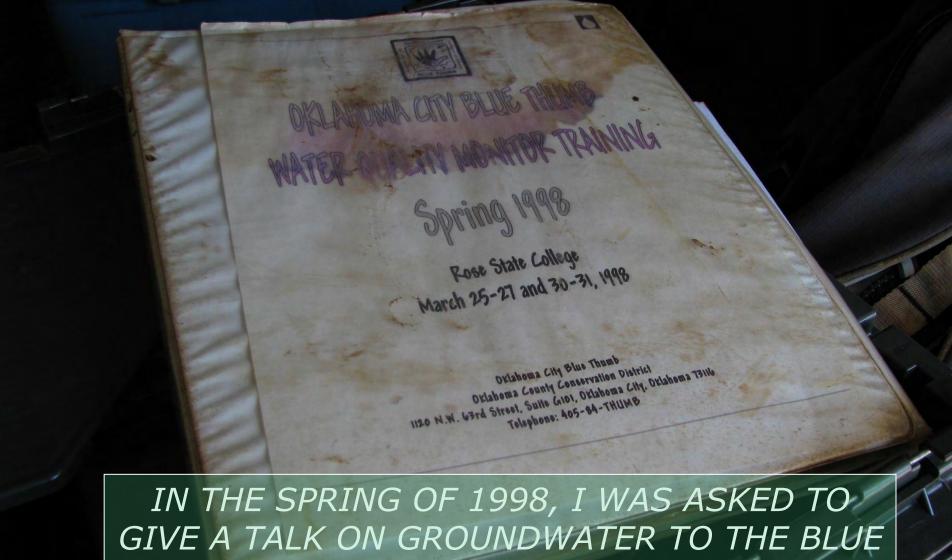
13 YEARS AND A LOT OF BLUE THUMBS.... Spring 1998 Rose State College March 25-27 and 30-31, 1998 Oxiahoma City Blue Thumb Oxiahoma County Conservation District 1120 N.W. 63rd Street, Suite Giot, Oxlahoma City, Oxlahoma Taille John Harrington, ACOG April 8, 2011 acog

LOOKING BACKWARD.....



THUMB ORGANIZATION. OF COURSE, I IMMEDIATELY WONDERED ...

WHO/WHAT IS BLUE THUMB?

Water Quality Division

Blue Thumb Program

A water pollution education program of the Oklahoma Conservation Commission's Water Quality Division. The goal of Oklahoma's Blue Thumb Program is to protect water resources against nonpoint source pollution by empowering citizens to protect water quality. This is accomplished through:



- · Educational workshops
- Tours
- · Demonstrations and Presentations
- Monitoring

NOTE: THEY DIDN'T HAVE A WEBSITE THEN. MOST PEOPLE DIDN'T EVEN HAVE INTERNET SERVICE IN THOSE DAYS.....

I FOUND OUT THEY WERE A BUNCH OF "STREAM VOLUNTEERS".

WHAT IS A VOLUNTEER?

In general terms, **volunteering** is the practice of people working on behalf of others or a particular cause without payment for their time and services. Volunteering is generally considered an <u>altruistic</u> activity, intended to promote good or improve human <u>quality of life</u>.

NOTE: THE PRESENT SECRETARY OF ENVIRONMENT IS A VOLUNTEER!!

But people also volunteer for their own skill development, to meet others, to make contacts for possible employment, to have fun, and a variety of other reasons that could be considered <u>self-serving</u>.

- Wikipedia, April 2011

It is one of the most beautiful compensations of this life that no man can sincerely try to help another without helping himself.....

-Ralph Waldo Emerson

LOOKING BACKWARD.....

NOVEMBER 2006

Blue Thumb - Why I Volunteer?

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As time passed, another benefit emerged which I had not foreseen at first. Continual observation of my site has shown how the creek has reacted to changes in the watershed, both on an annual basis and over the years. Every spring grass clippings from mowed yards flow down the creek. Some years have more trash than others. Occasionally some petroleum product makes its way into the system. Watching this has given me a sense of the dynamic system that is the urban stream and what we do to it as we live the life of suburbia.

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Finally, Blue Thumb gives me a great opportunity to meet people and work with them. Over the years I have developed good friendships with a number of people and I look forward every month to the hour or so I spend in the field with them. These are intelligent people with a desire to learn more about the world about them and to become better stewards of their backyards. These are the kind of people I want in my community. These are the kind of people we need to grow and nurture in the next generation, so that our children can have a healthy environment to live in.

WHAT ISN'T A VOLUNTEER?



BUBBA IS NOT A VOLUNTEER

WHO ARE THESE VOLUNTEERS?

MY FIELD PARTNERS HAVE DAY JOBS THAT INCLUDE BEING:

- PETROLEUM ENGINEERS
- HYDROLOGISTS
- CHEMISTS
- SUCCESSFUL BUSINESS PEOPLE
- STUDENTS ENVIRONMENTAL SCIENCES, BIOLOGY, BUSINESS ADMINISTRATION
- AND JUST PLAIN FOLKS....

LOOKING BACKWARD......

DO VOLUNTEERS STICK AROUND?

I HAVE STUCK AROUND 13 YEARS.

GRETCHEN, MY PRESENT FIELD PARTNER, HAS BEEN A BLUE THUMB VOLUNTEER SINCE DEC 2000

• THE AVERAGE JOB IN AMERICA IS ONLY 5 YEARS IN DURATION.

- RICHARD BOLLES "What Color is Your Parachute?" 2009

Volunteers get out of their comfort zones....



COMFORTABLE

GEOMORPHOLOGY

MINEROLOGY

STRATIGRAPHY

SEISMIC WAVE

THEORY

DIFFERENTIAL EQUATIONS

HMMMM...

UNCOMFORTABLE

ANYTHING THAT MOVES

John Harrington before Blue Thumb

Volunteers get out of their comfort zones....



COMFORTABLE

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HMMMM....

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UNCOMFORTABLE

John Harrington after Blue Thumb

WHAT DOES A VOLUNTEER LOOK LIKE?



LOOKING BACKWARD.....

SOMETIMES WE LOOK BETTER THAN THAT.....

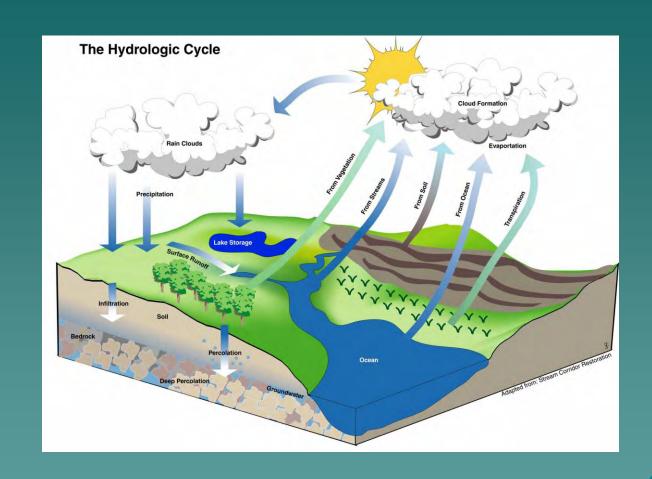


SOME INTERESTING STATISTICS....

VFI Scale	Adult Volunteers (early 1990s) N = 465	Students (early 1990s) N = 534	Elderly Volunteers (mid 1990s) N = 61	Adult Volunteers (early 2000s) N = 1350
Values	5.82	5.37	6.04	5.61
Understanding	4.91	5.13	4.36	4.52
Enhancement	4.27	4.64	4.98	4.03
Career	2.74	4.54	1.42	2.31
Protective	2.61	3.25	3.92	2.76
Social	2.59	2.95	3.90	2.98

Volunteers are generalists.

How much of the hydrologic cycle do you **REALLY** know?



LOOKING BACKWARD.....

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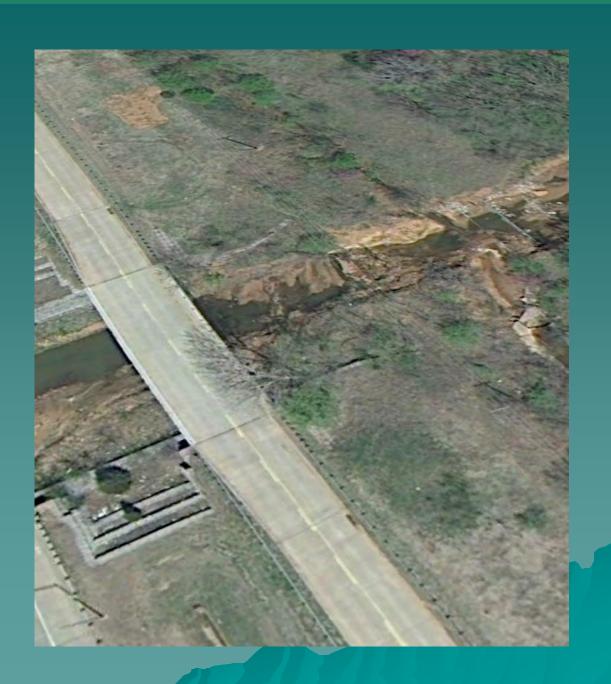
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SPRING CREEK, EDMOND



The Stream is ALIVE!



The Stream is ALIVE!

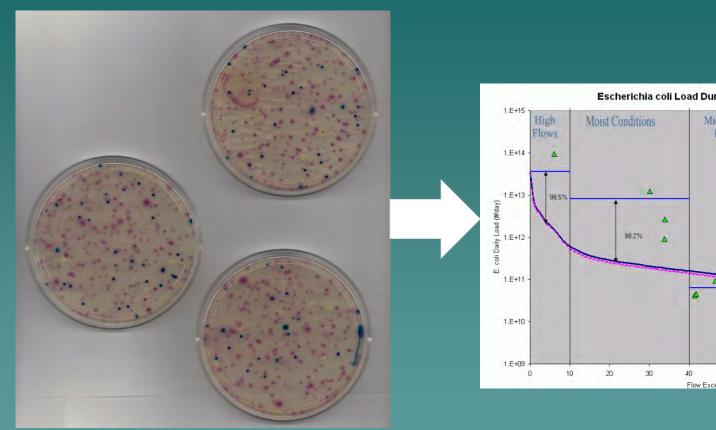
SPRING CREEK

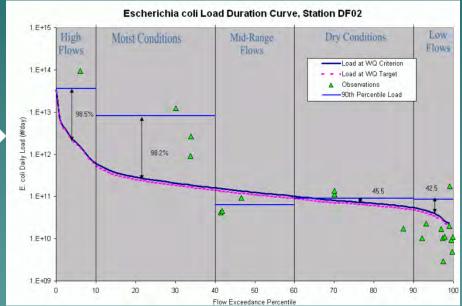
- Overall water quality in the creek is good, although dissolved oxygen levels are lower than desirable.
- The creek is typical of most urban streams in the sense that historically little has been done to preserve habitat. Although Spring Creek has not been confined in a trapezoidal concrete structure, habitat is poor in the creek, much of it due to lack of substrate and instream cover.
- The creek does not have the diversity of macroinvertebrates and fish found in the typical reference stream for this ecoregion.
- The root causes of these problems are generally due to poor erosion control practices in the watershed and higher flows developing from more runoff as development occurs and impervious surfaces increase.

The Stream is ALIVE!

Cross Timbers Macroinvertebrates		Spring Creek: 1-35 Winter 2003 Riffle	Spring Creek: 1-35 Winter 2004 Riffle	Spring Creek: 1-35 Winter 2005 Riffle	Spring Creek: 1-35 Winter 2006 Riffle	Cross Timbers Reference Winter Riffle Average	Spring Creek: 1-35 Summer 1998 Riffle	Spring Creek: 1-35 Summer 2000 Riffle	Spring Creek: 1-35 Summer 2001 Riffle	Spring Creek: 1-35 Summer 2002 Riffle	Spring Creek: 1-35 Summer 2003 Riffle	Spring Creek: 1-35 Summer 2004 Riffle	Spring Creek: 1-35 Summer 2005 Riffie	Cross Timbers Reference Summer Riffle Average
			1	Raw Res	sults									
Taxa Richness EPT Taxa Richness EPT Abundance HBI Score % Contribution Dominants Shannon-Weaver Diversity		11 0.04 5.59 0.39 2.5	11 0.02 6.86 0.24 2.71	14 2 0.17 6.87 0.26 3.04	0.00 6.88 0.34 2.63	16 5 0.27 5.88 0.39 1.95	15 2 0.13 6.63 0.26 3.20	11 0.04 7.03 0.52 2.04	15 3 0.07 5.81 0.30 2.57	11 2 0.03 6.72 0.52 2.09	15 3 0.1 6.39 0.43 2.34	13 2 0.02 7.23 0.53 2.14	10 2 0.20 6.97 0.43 2.40	20 7 0.34 5.59 0.26 2.36
Taxa Richness EPT Taxa Richness EPT Abundance HBI Score % Contribution Dominants Shannon-Weaver Diversity		0.69 0.20 0.04 1,05 0.39 2.5	0.69 0.20 0.02 0.86 0.24 2.71	0.88 0.40 0.17 0.86 0.26 3.04	0.69 0.00 0.00 0.85 0.34 2.63	1.00 1.00 0.27 1.00 0.39 1.95	0.75 0.29 0.13 0.84 0.26 3.20	0.55 0.14 0.04 0.80 0.52 2.04	0.75 0.43 0.07 0.96 0.30 2.57	0.55 0.29 0.03 0.83 0.52 2.09	0.75 0.43 0.10 0.87 0.43 2.34	0.65 0.29 0.02 0.77 0.53 2.14	0.50 0.29 0.20 0.80 0.43 2.40	1.00 1.00 0.34 1.00 0.26 2.36
Taxa Richness EPT Taxa Richness EPT Abundance HBI Score % Contribution Dominants Shannon-Weaver Diversity		4 0 0 6 2 2	4 0 0 6 4 4	Metric S 6 0 2 6 4 4	0 0 0 6 2 4	6 4 6 2 2	4 0 2 4 4 4	2 0 0 4 0 2	4 0 0 6 2 4	2 0 0 4 0 2	4 0 2 6 0 2	4 0 0 4 0 2	2 0 4 4 0 2	6 6 6 4 2
Comparison to Reference	Total Score	14 0.54	18 0.69	22 0.85	16 0.62	26 1.00	18 0.60	8 0.27	16 0.53	8 0.27	14 0.47	10 0.33	12 0.40	30 1.00
Companion to Norol Gilla	Condition	В	В	Α.	8	Α	в	C.27	у.55	C	C.47	С.	C.40	Α

SPRING CREEK BY THE NUMBERS....





SPRING CREEK IS NOW LISTED FOR IMPAIRMENT - E.COLI

LOOKING FORWARD....

THE FUTURE

With a new era of fiscal responsibility and tighter budgets, volunteers will play an even larger part in all aspects of society.

(Don't believe me? Just Google "volunteer" and "tight budgets"!!!)

LOOKING FORWARD.....

NOVEMBER 2006

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LOOKING FORWARD.....



WE TEACH THEM MORE THAN JUST ABOUT CREEKS AND FISH. WE TEACH THEM ABOUT THE RELATIONSHIPS AROUND AND BETWEEN US.



WE TEACH THEM ABOUT LIFE.