

**Visioneering Wichita Environmental Sustainability Alliance  
Designing a Sustainable Future  
Community Discussion on Water**

November 18, 2010

**What do you think are the biggest barriers to achieving improved water quantity and quality in our region?**

- For utility water supply, cost is low and quality is high
- Money
- Lack of political will to regulate developers
- Need for conservation program
- Uneducated public as to need for action
- Lack of a coordinated effort on water issues.
- More emphasis on bringing all entities together to form a more structured approach to water issues
- People just not knowing & understanding the issue – at their level
- Too much regulations
- Ag runoff
- Money
- Not enough storm water regulations
- Financial cost
- Community education
- Accountability of actions
- Technology can improve quality but how are removed contaminants disposed of?
- Regional collaboration and political agendas and willingness to make tough decisions
- Agriculture runoff
- Lack of knowledge by public of conservation practices
- Mindset, ignorance of situation
- Lack of municipal long-range plan & benchmarks at the public citizen level
- Over land flow (non point) is the largest impediment of water quality but cannot be regulated
- Grass protective strips, increased wet lands
- Citizen understanding, both the good things and what citizens can do
- Discourage unregulated development
- Financial priorities in difficult financial eras that put environmental concerns too far down
- Lack of knowledge of problems and solutions
- Knowledge – people don't know what to do & that they can do anything
- Irrigators and lack of incentive for conservation
- Public education & local government support
- Lack of understanding
- Storm water - carelessness of citizens in trash disposal, grass cuttings in street, fertilizing runoff
- Poor planning & zoning by local government
- Poor lawn care management i.e. over application of pesticides & fertilizer

- Getting adequate funding & public support
- Better planning & development – stop building in flood plains
- Political & citizen willpower, ignorance and no one likes to diet – especially when diet means cost \$\$\$\$. It takes water to create energy & it takes energy to clean water.
- Education of citizens, local politician, developers, realtors
- I believe major barriers are money and sustainability
- People understanding what the entire cycle of water is and how it affects them and how they affect it.
- Salt impacts from natural formations
- Economic concerns – costs to clean up wastewater to standards
- Non-point source contributions and costs to address
- Reduce the amount of water that is wasted through landscape irrigation. I am in favor of responsible lawn irrigation, but too much water is wasted when systems are turned on too early in the season or turned off too late in the season. Additionally, too much water is wasted when irrigation systems run during or right after a rain event. Daily irrigation is also unnecessary. The City of Derby recently required all business and homeowners with irrigation systems to install a rain sensor to prevent systems from turning on during a rain event. This is a VERY simple way to begin engaging citizens in the discussion of water conservation.
- A holistic approach of education (K-State & Sedgwick County Extension) combined with a commitment by our City leaders to follow up with some meaningful, yet realistic, regulation would be a great step in the right direction.

*Flip chart notes:*

- *Money*
  - *Individual cost*
- *Awareness – lack of at citizen/small biz level*
- *Knowledge – lack of at citizen/small biz level*

**If you could do only one thing to improve water quantity, what would it be?**

- Encourage ERU storm water
- Conservation
- Revisit & reuse the 50 year plan (City of Wichita plan) with business plan addressing revenue vs. conservation conflict
- Rain barrels required at all homes
- Stop lawn irrigation
- Build new water supply reservoir
- Awareness & education
- Create and improve reuse opportunities
- Encourage reducing consumption
- Conserve what we have
- Educate young people
- Reduce thru high efficiency fixtures and low (no) potable use landscape
- Recognize El Dorado Reservoir as capable of 30 MGD & for high quality AVS – that is much more effective than ASR

- Identify what citizens do to impact water quantity
- Recognize the downtown river banks as a major attraction for the city – develop boating, parks, etc. – taking back pollution source & apply funds to cleanup
- Subdivision regulations requiring certain plantings that require more water
- Eliminate “use it or lose it” water rights – have incentive for conservation
- Public education campaign
- More education of public in needs
- Install RO treatment system to treat water from the Ark River
- Controls on sprinkler systems to keep them from running after & during rainfall events
- Encourage individuals to stop illegal dumping and better use of pesticides
- Change the plumbing code & bring it into the 21<sup>st</sup> century
- Implement landscape watering laws. No other country in the world has such a love affair with turf green grass or has made turf grass the largest irrigated crop
- Maintain realistic water rates to encourage conservation of water use by both industry & citizens
- Get the agricultural community to irrigate more effectively
- Educate people on use of rain barrels & conservation
- Increase surface water storage to take demand off groundwater
- Reduce irrigation frequency
- Limiting/controlling groundwater usage

*Flip chart notes*

*Quantity*

- *Ban fescue*
- *Design home to collect water*
  - *Greensburg*
- *Composting toilets, reusing water*

**Similarly, if you could do only one thing to improve water quality, what would it be?**

- Expand River City WRAPS funding
- Reduce ag & urban storm water runoff
- Comprehensive urban bmp's for storm water to address tmdl's
- No pesticides
- Use ground cover when appropriate
- Fund WRAPS
- Talk to neighbors to educate
- Embrace technology
- Create better partnerships between the ag community and urban areas to partner on run-off issues. Non-point sources must be addressed
- Educate – install rain gardens, rain barrels
- Capture runoff from impervious surfaces in bio-detention swales (filtration design w/outflow to storm sewer & natural percolation to aqueous systems) to reduce particulate & petroleum contaminates
- Regulate agriculture & chemicals/pesticides usage
- What are citizens doing or failing to do

- Emphasis on river water for recreation – boating, fishing swimming – citizen outrage might propel politicians to take action & meet quality goals
- Reduce fertilizers
- Implement sediment prevention strategies
- Get aggressive with phosphate sources – regulatory – BMP education
- Increase regulation follow through & enforcement. AKA: more \$ to hire regulators
- Implement & enforce a very strong municipal storm water management program
- Control of non-point source pollution
- Encourage individuals to stop illegal dumping and better use of pesticides
- Reduce impermeable areas – utilized pervious permeable concrete
- Increase cost for lawn irrigation
- Real effort to reduce goose population, ordinance to pick up after pets
- Require soil tests for all lawn care company applications
- Plan many more rain gardens/anti-erosion projects with the community
- Fund best management practices to reduce non-point source contamination
- Reduce runoff, reduce runoff, reduce runoff! This would mitigate urban flooding and improve water quality. A true “win:win”. These don’t come along very often
- More green space, previous pavement, rain gardens, and perhaps even green roofs all would have an impact on reducing runoff.
- Reduce mowing and raise mowing height
- Controlling usage of pesticides and fertilizers near rivers and aquifers

*Flip chart notes*

*Quality*

- *Illegal dumping*
- *Pesticides*
- *Enforce policies*
- *Sweeping into gutters*
- *Improve public access to rivers*
- *New construction/renovation – collecting water*
- *Sprinklers during rain – moisture content gauge*

**What are you currently doing to improve water quality and/or quantity in the region?**

**As an individual**

- Conserve (toilet, shower heads)
- At home collecting & composting pet waste
- Paying attention to home use – reducing waste (i.e. of water)
- Rain barrels on all by downspouts
- I never water my lawn
- Xeriscaping – mulching – less irrigation
- Conservation – minimize irrigation, exterior cleaning with water, etc.
- Not watering lawn and other efficiency measures at home
- Limit fertilizer & pesticide use, reduce

- Working to form USGBC branch in Wichita promoting conservation thru change in the built environment
- Minimize chemical use on lawn
- Ranch owner – Green County – trying to improve grassland & stream erosion
- User “greener” products for cleaning, etc.
- Water conservation
- Move to low flow toilet, faucet in new bathroom
- Front loader washer
- Minimize lawn irrigation
- Lots of water conservation at home
- Using rain barrel
- Using grey water to water plants
- Composting & using in gardens to conserve water by mulching
- Using less fertilization on yard
- Simple ways to control outdoor water use and reduce runoff from lawn
- Educate people about water quality & quantity
- I have rain barrels & rain gardens
- I utilize the HHW facility, I clean my storm gutters, I have low flow toilets, taps & showerhead & front loading washer.
- I do not irrigate my lawn; I have planted native & naturalized plants
- I volunteer to plant rain gardens over the summer
- Using rain barrels, have buffalo grass planted in my street
- Pick up trash in neighborhood
- Fertilize only lawn and avoid spreading on street
- Teach son about storm water runoff/trash impacts
- Plant trees, have a buffalograss lawn (reduce mowing), improving home energy efficiency
- Keep car and truck tuned up

### **As a business or organization?**

- WIRE projects
  - Pilot projects to conserve
  - Rain gardens and other similar structures in an effort to improve storm water runoff water quality
- Create green buffer areas
- CH2M Hill is an engineering consulting firm ranked #1 in water related engineering and #1 in sustainable solutions/projects
- Encouraging regional cooperation and community engagement to look at environmental issues
- Changing faucets that are motion activated
- Teach kids how to save water when brushing teeth
- Providing education to public about importance of sustainability & methods used to achieve balance thru management of the built environment
- Center for Environment & Human Health website based on watershed for sharing of information, research etc.

- Teach & emphasize water conservation
- Water quality & quantity education with youth
- Storm water pond maintenance education program
- Minimum
- Organization is initially interested and lobbying in Topeka on water issues
- I am an educator & a biologist for the City of Wichita working in Environmental Health. I deal constantly with quality & quantity issues of water
- Active in WRAPS & water quality issues
- Participate in Kansas/WRAPS Technical committee River City/Wichita WRAPS
- We are involved in research and education as it relates to horticultural practices. Examples include: Tree, shrub, and grass selection and planting techniques
- Most of our landscape is designed to xeriscape principles. Most is planted to warm season turf.
- Replacing ventilation filters on a regular basis
- Plant trees for the oxygen

*Flip chart notes – resources*

- *Collaboration*
- *Public input/education*
- *Positive activities – reward*
- *Educate media*

**What *should* we all be doing – by working together in new ways – to improve water quality and quantity in our region?**

- River city WRAPS
- Education as to the needs
- Education & implementation
- Quit lawn watering
- We've made a lot of strides with Visioneering, SMAB, etc. Develop incentives to reduce water use.
- Push for improved public access to waterways to increase awareness
- Continue to look at options, use common sense regarding opportunities, and educate the community; for example – 1000 gallons of water is \$5+/- where milk would be \$2000+/-; aver water bill is \$30-\$100, average cell phone or cable bill are \$50-\$200+/- each
- Have additional community dialogues to increase education and start talking water concerns regionally
- Increase areas for water absorption – natural areas – these places will improve water, air & aesthetics
- Advocate creation of symbiotic systems\* that collectively achieve sustainable levels & eventually environmental balance. \* transportation, solid waste, sanitary & storm sewers, green space (parks, etc.) building codes/policy/enforcement, energy, etc.
- Look at water sources on a regional basis! Too narrow focus by Wichita with too much legally involved with ASR
- Elevate the topic - as a society, we assume we have clean & unlimited water

- The Geo Dept. at WSU has expanded into environmental with a new master program. We would like to work with/partner with city & county organizations to monitor remediation etc. & to train future professionals for careers in environmental protection & improvement.
- Public awareness plus provide solutions
- Could use trained K-State engineering partners to visit municipalities & industry to identify water conservation opportunities. This reduces water associated energy.
- I haven't heard much about water conservation lately. Folks today need to know "why" they are conserving not just that they "should".
- Getting busy into fund improvements
- Being involved with what is going on around you
- The inertia of the way things are has been extremely difficult to overcome. When it comes to whose ox gets gored & the money involved – there's a saying that has been very true in very ironic ways: "Water flows uphill toward money." I've been working with water issues for 20 years – yes – I'm a bit jaded.
- We should have another water meeting. Also we should all treat water preciously and use it to our advantage.
- Fertilize responsibly
- Limit grass cuttings into gutters
- Pick up trash in streets
- Keep lids on trash cans
- Recognizing that potable water is one of the most valuable resources we have is a good first step. The health of a community is very closely tied to the health of its natural resources
- The city should employ "positive incentives" to encourage reduced water usage. Raising rates when usage drops is a stunning example of irresponsibility. When this happens you give people a financial incentive to use more water. Obviously that is not the intended outcome, but nonetheless, that is the message that is sent. Reducing rates on small users and increasing rate on larger users encourages intelligent utilization of water.
- Planting warm season turf – Bermudagrass and buffalograss in new parks and low maintenance areas, public areas along highways. And NOT install irrigation to turf in these low maintenance areas. Focus on planting adapted trees and shrubs.
- Go ahead and use irrigated turf in high visibility areas.
- Plant tall unmowed native grasses in waterways to slow water. Encourage this prairie look in golf roughs and other large areas that do not need irrigated.
- Focus irrigation on flower beds at entrances vs. irrigating large public areas.
- This tallgrass look is used at Prairie Dunes CC @ Hutchinson, Flint Hills National CC and Foxridge development.
- Rain sensors on all irrigation systems

### **How would you measure success when it comes to water issues in our region?**

- TMDLs are all accomplished
- Achievement of ASR goals
- Meeting TDML goals

- Obviously progress in water quantity & quality
- Less chloride intrusion
- Are our water issues/improvements sustainable
- Regional plan for water supply for future use and implemented water quality measures that hit at least TMDL targets
- Flatline or reduce overall water consumption for the region
- Just getting started – using eastern & western stats as measuring stick
- Not very much – many other long term solution are available that are not being explored
- Clear, clean river coming into our city & leaving it
- Native grass in open areas, parks & lawns
- Thriving fish & aquatic species in lakes & rivers
- Water rates that reward conservation
- Level of support for ASR continuation
- Seems to me that this large group should continue – perhaps meeting again in 2 weeks – to continue the conservation. We just get excited – then it's time to go home!
- Sounds like we need to get aggressive with conservation. This will help create an “ethic” that will lead to other practices being implemented.
- More folks using & interacting with water sources in respectful & responsible ways
- Decrease in water usage at water treatment plant
- Decrease in TMDLs in our area
- Increase in public interest & financial support
- Not enough prevention and lack of education of the people
- Quality – reduced flooding & progress in the reduction of TMDLs impairments
- Quantity – the per capita water use is reduced by 15% not just flat lined
- On a scale of 1 – 10? 7 because of how many in our community who care and are acting
- Seeing the #s Deb Ary referred to keep increasing – more clean water available for more years
- Reduced nutrient loads
- Reduced sediment loads
- Reduced ground water demands
- Reduced bacteria levels
- Healthier fish populations
- Reduced water usage, reduced storm water runoff, and decreased urban flooding.
- Policies that encourage water conservation and financially (or otherwise) reward those who make efforts to save water are needed
- Efforts to conserve water now, will assure future generations of having clean drinkable water

### **General Comments**

- Go to Greensburg – see what's being done
- I think it would be great to encourage public education on lawn maintenance – BMPs for lawn care – conserve & protect – natural fertilizers, composting, rain barrels, etc. TV, PSA, radio, newspaper

- Built Environment – anything natural that humans have altered to suit their own propose...not just buildings!
- Need to stop irrigating
- Need restrictions on water hook-ups
- Water conservation