

Draft Goals, Objectives, and Strategies for Black Creek Watershed Management Plan

A. Goals (long-term results)	B. Med-term results	C. Objectives (Specific, Measureable, Achievable, Realistic & ambitious, Time-bound)	D. Potential strategies to achieve objectives (Oct 2008 BCWA, previous discussions, tech team/expert recs)
<p><i>Educational Opportunities</i></p> <p>Community has increased understanding about and exercises stewardship towards Black Creek.</p>	<p>Provide outdoor educational activities for the community</p>	<ul style="list-style-type: none"> • People attend workshops held 3-4x/year and understand concepts • New members recruited to BCWA • <u>75% of BCWA residents aware of BC situation and 25% implementing water quality "best management practices on an individual basis.</u> • People install raingardens & rain barrels • People solicit help for best management practices • Use information targeted towards BC residents to improve outreach methods 	<ul style="list-style-type: none"> • Create demonstration sites in public spaces • Community workshops <ul style="list-style-type: none"> ○ Involve Lowes with workshops ○ Incentives- rainbarrel door prize ○ Partner with TOC <u>Water conservation and volunteer coordinator</u> staff for workshops • <u>Raise awareness of TOC buyback for removing turf</u> • <u>Involve Town of Cary "Block Captains" in the BCWA & disseminating "green" water quality information available online to residents such as DWQ document "Improving Water Quality in Your own Backyard" and NCSU document "Landscaping for Wildlife w/ Native Plants".</u> • Provide plants from local garden store • Create path markings (indigenous veg., stream elements) • Conduct stormdrain stenciling • Conduct willingness to pay study for watershed improvements
<p><i>Health/Welfare</i></p> <p>Provide clean water for safe physical contact with creek (secondary recreation)</p>	<p><i>Reduce fecal coliform levels in stream to <200 cfu/100ml</i></p>	<ul style="list-style-type: none"> • Stormwater BMP retrofits on outfalls • Install pet waste stations along greenway, at HOAs • <u>X # people pledge to pick up after dogs</u> • <u>Reduction of illicit discharges in BC tributaries</u> 	<ul style="list-style-type: none"> • <u>Illicit detection elimination program through TOC to investigate potential cross connections</u> • <u>Partner w/ TOC Stormwater Dept/ NCSU Tech Team to target corrective actions for potential "illicit" discharges</u> • Educate residents about pet waste – distribute materials through HOAs

1/6/2009

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Aesthetically pleasing natural green space provide for emotional/spiritual experiences		<ul style="list-style-type: none"> • <i>Preserve additional open space in watershed- do not allow offset payments (payments in-lieu)</i> • <i>Protect TOC property adjacent to Creek/Cary Parkway as natural area, use as natural resource education site, use LID on any facilities</i> • <i>Identify areas of natural interest, such as vestiges of the former Natural Heritage Site, wildflowers, outcroppings</i> • <i>Create view spots and opportunities for sitting, bird watching, reflection</i> 	<ul style="list-style-type: none"> • Work with TOC staff and PRCR Advisory Board on design of BC Greenway renovation Maintain greenway • Encourage more watershed groups in Neuse • Identify areas of natural interest for preservation or recreational opportunities • BCWA participates in BC Greenway Public Art Project planning
Local Economy			
High property resale value maintained	Aesthetically pleasing greenway, natural resources, and clean water	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Improve access to greenway • <u>Improve greenway (camouflage sewer manholes; remove exotic species)</u> • <u>Look into feasibility of conducting a holistic GIS ecosystem analysis/green inventory of the watershed that could provide a cost-benefit analysis to TOC officials and potentially influence development-related decisions to be more sustainable for water quality, stormwater, and other functions/values.</u>
*Economic development (?)	Reasonable BMP expectations/restrictions		
Recreation			
Maintain pleasant pedestrian & bicycle recreation & travel	-Safe pedestrian access -Connectivity, continuity -More community	<ul style="list-style-type: none"> • <i>Protect TOC property adjacent to Creek/Cary Parkway as natural area, use as natural resource education</i> 	<ul style="list-style-type: none"> • Continue and/or expand Big Sweep for Black Creek • Consider pervious pavement options • See pet waste strategies in “Provide Clean Water” strategy

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	recreational events (train runs, bird counts) -Pleasant odor- no offensive smells (sewer, pet waste)	<i>site, use LID on any facilities</i> <ul style="list-style-type: none"> Consider establishing BC Greenway as linear park Preserve additional open space through acquisition and/or conservation easements Continue/expand litter maintenance efforts (2x/year?) Reduce pet waste on the greenway 	
Recreation in Lake Crabtree is improved.	-Sediment control	<i>Black Creek can contribute by reducing sediment and pollutants</i>	<ul style="list-style-type: none"> Control sedimentation and erosion from devpt sites Citizens learn to recognize and report erosion control failures (through Muddy Water Watch)
Bird watching opportunities are maintained or improved	-Increased bird habitat (natural and manmade, like bluebird houses)	<ul style="list-style-type: none"> See wildlife category 	<ul style="list-style-type: none"> Make and sell birdhouses with BCWA logo, or sell for naming rights See recs. Under "Wildlife" category
Wildlife			
Maintain and increase diversity and abundance of terrestrial and avian wildlife in watershed	-Maintain/ improve quality riparian corridor -Increase native vegetation	<ul style="list-style-type: none"> Bird species remains same or increases relative to last survey (Hess& student study) 	<ul style="list-style-type: none"> Kill/remove invasive vegetation & manage for native vegetation Maintain unbroken forest canopy over greenway, narrow trails Maintain forested corridors of >150 ft. Maintain or provide high canopy coverage in devpts. adjacent to greenway Install many raingardens and wetlands Bird/bat houses
Increased diversity and abundance of aquatic animals in Black Creek <u>and its tributaries by improving water quality</u>	-Reduced volume & velocity of stormwater reaches Black Creek and tributaries -Reduced amounts of organic pollutants (?)	<ul style="list-style-type: none"> <u>Three large retrofit BMPs completed and 24 residential retrofits by 2012</u> No additional stormwater runoff is generated from new development (to equal net loss of runoff) Macro-invertebrates have a "good" 	<ul style="list-style-type: none"> <u>Retrofit BMPs throughout watershed through partnerships with HOAs, neighborhoods, commercial landowners, TOC, Wake County Schools. (BMPs for lots, small catchments, and intersecting stormwater channels/outfalls)</u> <u>Encourage TOC Depts. of Engineering and Planning to promote</u>

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	-Improved instream and terrestrial habitat	rating in 10 years, <u>with increases of EPT species seen within next 5 years</u> <ul style="list-style-type: none">• Salamander populations stabilize or increase (<u>see Miller 2005 data</u>)	<u>protection of existing riparian buffers and headwater stream/wetland areas, and restoration of impaired riparian buffers to at least 100' wide on perennial streams where practical.</u> <ul style="list-style-type: none">• Recognize businesses, organizations who partner for retrofits• Work with NC Museum Natural History experts to determine feasible goals for salamanders

References:

NOAA Coastal Services Center, Project Design and Evaluation Training workbook.