

Chapter 6

Chapter 6. Watershed Plan Recommendations

6.a Process for Determining Recommendations

The Stakeholders took several steps in determining their recommendations for reaching each achievable goal. They began by brainstorming strategies to achieve these goals. These strategies are general ideas for approaches that could be used. They realized that strategies tended to apply to more than one goal. Next, they matched each strategy with the applicable achievable goals. Then, the Stakeholders wrote policy recommendations that clarified how the strategy could be used to achieve each goal. Finally, as a group, they reviewed each recommendation to assure that its intent was clear and well stated, and that it helped to achieve its respective goal. The Stakeholders formally approved the recommendations at their January 29th, 2007 meeting.

It should be noted that the recommendations are somewhat general. The Stakeholders decided it was important to make the overall message of each recommendation well-stated for policy makers. However, they wanted to leave flexibility for the different governing agencies regarding the specifics of implementation. The Stakeholders also thought that they did not have the technical expertise, nor time to add sufficient detail on how each recommendation should be implemented.

6.b Recommendations

Note: these recommendations are not prioritized.

Recommendations that apply to all goals:

- 1) It is important to have a follow-up program to assess the effectiveness of plan implementation. This follow-up program includes three aspects:
 - **Enforcement/inspection** will assure that new ordinances are being followed.
 - **Maintenance** of new stormwater and sewer infrastructure will be necessary for proper functioning.
 - **Plan evaluation** is key to understanding whether the plan is being followed as intended, and how effective the various measures are. This may include actual stream monitoring, as well as analyzing implementation of the recommendations. Stream monitors must use generally accepted, quantifiable measures of water quality obtained at regular intervals on an ongoing schedule, and the data must be collected by certified entities/persons.
- 2) **Equity:** Measures implemented to protect water quality should not unfairly burden individuals. Every effort should be made to create incentive-based programs.

Goal	Strategies	Recommendations
Ensure that structures are not built in places that will flood	Update 100 year floodplain maps and regulations	Political subdivisions should consider complete hydrologic modeling to determine where the 100-year floodplain would be under full build-out conditions, and locate it more accurately on floodplain maps. This modeling should be limited to developing areas to keep costs down. Allow no construction of structures for occupancy in the re-delineated 100-year floodplain.
	Zoning – Streamside buffer ordinance	Adopt a stream buffer ordinance that limits construction within its boundaries
	Design manual	Do not permit new development to increase peak flows downstream so that flooding is not exacerbated.
	Purchase structures that flood now	City or County may offer to purchase a structure, at prevailing market rate, to correct a flooding problem in an existing neighborhood, if the cost of correcting the problem exceeds the value of the structure.

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Goal	Strategies	Recommendations
Conserve recharge & karst areas with special protections	Design manual/ Performance based goals	The <i>level of service</i> (following Columbia’s proposed storm-water manual and ordinance) will be more restrictive (e.g. by one or two points on the level of service scale) in karst and recharge areas than in other areas. Local governments will adopt similar, compatible stormwater ordinances and design manuals.
	Zoning	Zoning ordinances will establish specific criteria for development in karst recharge areas. These should include defining levels of stormwater quantity and quality, and limiting new sanitary sewers to <i>no discharge systems</i> .
	Land purchase	Local governments may purchase land from willing sellers in karst recharge areas, but other options for protecting water quality should be explored first. Create management plans for this purchased land with a primary goal to protect water quality. (Government takings or eminent domain should not be used for acquiring land for this purpose)
	TDRs & conservation easements	Transfer of development rights (TDR) should be established county-wide, with sensitive areas (such as karst recharge areas and steep slopes) being primary sending areas. This program should enable the cities and the county to have <i>joint program reciprocity</i> . TDR and conservation easements should be economically and logistically feasible options for use by landowners and developers.
	Tax relief	Create incentives to encourage conservation in karst recharge areas.
	Zoning and Subdivision regulations; Design manual	Consider a plan to provide special protections to karst and recharge areas.
	Further scientific study and monitoring	More scientific analysis should be done to delineate further karst recharge and other environmentally sensitive areas, and more definitively identify sources of contamination.

Goal	Strategies	Recommendations
Ensure that changes in land use do not increase downstream flooding or channel instability, or decrease water quality	Design manual	The <i>level of service</i> (following Columbia’s proposed stormwater ordinance and manual) for stormwater runoff flow characteristics post-development shall be no less than pre-development. Similarly, stormwater quality should have the same or better characteristics for post-development as it had pre-development. Local governments should adopt similar, compatible stormwater ordinances and design manuals.
	Encourage <i>low impact development (LID)</i>	Local governments should establish additional zoning and subdivision regulations that allow LID as a <i>matter of right</i> (i.e., approval will be expedited). This avoids the problems associated with the planned development process and encourages LID.
	Education	Make new stormwater manuals and ordinances widely available and familiar to the public through a public outreach and education effort.
	Develop funding mechanisms	New sources of funding should be pursued to assist landowners in implementing stream-protection <i>best management practices (BMPs)</i> . Compile a list of available sources of funding and provide to landowners and developers.
	Financing of storm water program	Secure sustainable, adequate funding for stormwater programs.

Goal	Strategies	Recommendations
Encourage low impact developments as a way to maintain or improve water quality	Education	Implement a comprehensive educational program for the general public, landowners, and developers to encourage LID.
	Design manual	Revise local governments’ development regulations to promote environmentally sensitive design and maintenance. The level of service (following Columbia’s proposed stormwater manual and ordinance) will be more restrictive (e.g. by one or two points on the level of service scale) in susceptible subwatersheds (following maps 6.0E, 7.3E and 8.2B of the Subwatershed Sensitivity Analysis) than in less susceptible subwatersheds . Local governments will adopt similar, compatible stormwater ordinances and design manuals.
	Tax relief, funding, Economic development	Create economic incentives to encourage developers to implement LID.

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Goal	Strategies	Recommendations
In order to maintain quality of life, encourage parks, healthy streams, LID, and municipal services.	Land purchase, Develop funding mechanisms, Economic incentives	Provide mechanisms and/or incentives to set aside land in non-LID developments for land to be set aside for parks or green space, especially in conjunction with a stream buffer. Encourage these features in other new, as well as preexisting, neighborhoods.

Goal	Strategies	Recommendations
Maintain the economic viability of the community while protecting clean streams	Education	Include information on protecting clean streams in development information distributed by the city and county (through web, forms, brochures). Develop a map that shows protected areas and include this in all literature related to development.
	Design manual	Local governments should adopt similar, compatible stormwater ordinances and design manuals that have stream protection information and requirements.
	Zoning	Address zoning where protection is necessary.

Goal	Strategies	Recommendations
Enhance healthy streams in parks	Education	Make stream protection a central part of park management. Establish park definitions to include stream protection goals. BMPs should be used on property owned by local governments.

Goal	Strategies	Recommendations
Maintain clean water without unnecessarily restricting property rights	Design manual	Give detailed design information to developers and engineers to assist them in controlling runoff quality and quantity from development.
	Zoning	Use voluntary zoning changes to direct density, and therefore higher runoff, to the most appropriate areas.
	Subdivision and zoning regulations	Revise local governments' ordinances and design manuals to enable reductions in impervious surface by allowing flexibility in street width, sidewalks, etc.
	Education	Expand public education newsletters and mail them more frequently.
	Develop funding mechanisms	Secure sustainable public funding for the operation and maintenance of BMPs, especially those initially funded by government agencies.
	TDRs and conservation Easements	Encourage landowners to use various economic incentives (e.g. conservation easements and TDR).

Goal	Strategies	Recommendations
Have policies which boost jobs, retail, tax base, and local economics	Zoning	Locate retail, by appropriate zoning, to areas that will allow the most efficient use of infrastructure and the least hazard of stream pollution.
	Economic incentives	Consider reduction in fees and other expenses paid by developers of commercial property, in preference to the creation of additional special transportation districts. For locally-owned businesses, give economic incentives to help implement LID. Use tax incentives for owners of LID-style commercial/retail structures.
	Zoning	Exempt agricultural land from restrictions and stream buffers to maintain and enhance maximum economic opportunity for farmers and related agricultural activities, as well as to keep land in agricultural use.

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Goal	Strategies	Recommendations
The impacts of upstream urbanization should be mitigated to prevent increased costs to agricultural and other downstream property owners.	Performance based goals/ Design manual	1) Determine baseline conditions for the establishment of monitoring programs. These conditions should include stream water quality, amount of stormwater discharge, <i>stream cross-sections</i> . 2) Publicly monitor at specified time periods at specific locations to determine effectiveness of currently implemented plan.
	Develop funding mechanisms	Ensure that local governments provide adequate funding for their stormwater programs via a stormwater utility fee.
	TDR & conservation easements	Use land purchase, TDRs, conservation easements, etc. where applicable to encourage conservation in appropriate areas.

Goal	Strategies	Recommendations
Ensure that BMPs do not unreasonably affect housing affordability.	Education	Publicize information on cost-effective BMPs.
	Zoning	Amend zoning regulations to allow for increased density in exchange for improved stormwater quality and quantity management.

Goal	Strategies	Recommendations
Ensure that certain areas receive special protections while maintaining the economics of urbanization.	Zoning	Zoning regulations will reflect the sensitivity of the watershed/subwatershed. This will allow for economic growth while protecting sensitive subwatersheds.
	Design manual	Revise local governments' stormwater design manuals with specific design criteria for sensitive subwatersheds.

6.c Plan Approval

The Stakeholders agreed that they play an important role when various agencies undertake the plan approval process. The Stakeholders are an important resource in order to clarify any uncertainties in relation to the plan. Their support will also be crucial to the plan's approval, since the Stakeholders represent various important perspectives from the community. They can play important roles, both in work sessions and in public hearings related to the plan.

After the plan is published, three public meetings will address the plan. These meetings, run by the Bonne Femme Watershed Project, will provide the public an opportunity to learn more about the plan. The thirty days between plan publication and the meetings will give the public time to read the plan, and prepare comments. The Stakeholders will have a follow-up meeting to respond to the public's comments. Both the public comments and the Stakeholders' responses will be published as a plan addendum.

Upon publication of the plan and its related addendum, members of the Bonne Femme Policy Committee (see Appendix D) should initiate the approval process with their respective agencies.

6.d Plan Continuity

Although county support for the Stakeholders will end with the conclusion of the Bonne Femme Watershed Project, Stakeholders may choose to function as an autonomous group. In order to keep the plan alive, Stakeholders felt that it was important that the plan's progress be evaluated over the next decade. They decided they would ask local governments for annual reports on the plan's implementation. These reports would help to hold local governments accountable for the plan's implementation. In addition, the reports will document local governmental support for the plan, aid the public in tracking the implementation of the plan, and provide for ongoing public input. Upon evaluation of the reports, the Stakeholders and the public may suggest how the plan could be more effectively implemented.