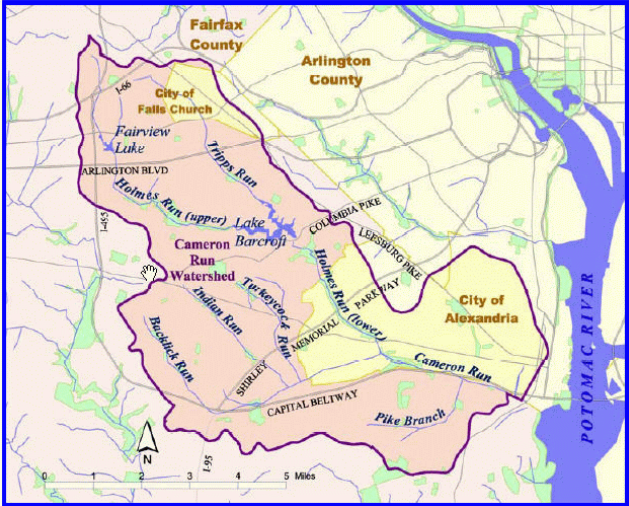


Cameron Run - Holmes Run Watershed



City of Alexandria, Virginia

MEMORANDUM

DATE: FEBRUARY 1, 2005

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

THROUGH: JIM HARTMANN, CITY MANAGER

FROM: RICHARD J. BAIER, P.E., DIRECTOR, TRANSPORTATION &
ENVIRONMENTAL SERVICES

SUBJECT: BACKGROUND AND UPDATE ON THE CAMERON RUN/HOLMES RUN
WATERSHED FEASIBILITY STUDY AND COST SHARE AGREEMENT
BETWEEN THE CITY, THE ARMY CORPS OF ENGINEERS AND
FAIRFAX COUNTY

The purpose of this memorandum is to provide City Council with background information and an update on the Cameron Run/Holmes Run Watershed Feasibility Study that the City has agreed to participate in with the Army Corps of Engineers (the Corps) and Fairfax County.

On September 29, 2004, the City entered into a cost sharing agreement with the Corps, and Fairfax County to complete a Feasibility Study of the Cameron Run/Holmes Run Watershed. The total cost of the Study is estimated to be \$4.92 million dollars with 50 / 50 split between the non-federal sponsors, the City and Fairfax County, and the Corps. The City's contribution to fund the Feasibility Study is in-kind matching funds of just over \$1 million dollars that is comprised of approximately \$200,000 in-kind services (primarily staff time) and \$850,000 of in-kind contract fees and studies (CIP projects) that the City has already agreed to fund within the existing approved CIP budget. No additional funding is requested to complete the Study at this time. Examples of the in-kind existing projects include the City's ongoing Sewer Mapping Project and Combined Sewer Study, and Phase II of the City Stream Assessment Project that is expected to begin this year.

The Feasibility Study is expected to be completed in 30-36 months with a target completion date in the Spring of 2007. A copy of the Feasibility Study Project Management Plan which provides more detailed information is provided as Attachment I.

The following are the overarching goals and objectives of the Feasibility Study that

were identified by the Study participants to determine the overall level of effort and ensure that the non-federal sponsors and the Army Corps of Engineers are in agreement on the scope of this study.

- Restore aquatic and riparian habitat;
- Reduce incidental flood damages in conjunction with habitat improvement;
- Enhance the aesthetics and habitat of the channel and levee corridor and other channelized streams in the watershed;
- Develop strategies to maintain the long-term viability of flood control measures and restore aquatic habitat; and
- Protect the Potomac River and the Chesapeake Bay.

The overall purpose of the Feasibility Study is to develop a comprehensive watershed master plan for Cameron and Holmes Runs that also identifies specific projects that can be implemented over the long term as resources permit. Specifically, the Feasibility Study Project Management Plan includes tasks to do the following:

1. To develop a watershed plan which will:
 - a. Act as a tool for evaluating, assessing and managing the watershed;
 - b. Provide goals and objectives for improving the watershed;
 - c. Recommend actions to achieve these goals and prevent or mitigate watershed problems;
 - d. Provide a benchmark for measuring the plan's success;
2. To evaluate and formulate these plans based on detailed engineering, economic, environmental, and cultural investigations;
3. To estimate costs and benefits to a level of detail suitable to justify the proposed plans and projects;
4. To determine the appropriate construction cost sharing arrangements and obtain non-Federal support, as necessary;
5. To prepare appropriate documentation for Federal project authorization;
6. To recommend favorable projects for authorization and construction, if appropriate; and
7. To comply with the National Environmental Policy Act (NEPA) requirements by preparing an environmental assessment (EA) or environmental impact statement (EIS), depending on level of impacts of proposed projects.

Specific goals, objectives and projects in the City of Alexandria will be determined by the City and the Army Corps of Engineers based on input from the public (i.e., Environmental Policy Commission, Parks and Recreation Commission, Holmes Run Park Committee, civic and homeowners groups, and other stakeholders). Once the Feasibility Study is finalized and specific projects have been identified and prioritized, the Corps of Engineers increases its cost share from 50 / 50 to a 75 / 25 percent split between the Corps and the City for construction related projects.

If there are any questions regarding the Cameron Run/Holmes Run Watershed Feasibility Study Project Management Plan, please contact William Skrabak, Division Chief, Environmental Quality at 703-519-3400 ext. 163.

Attachment I: Cameron Run/Holmes Run Watershed Feasibility Study Project
Management Plan

CC: Michele Evans, Assistant City Manager
Kirk Kincannon, Director, Recreation, Parks & Cultural Activities
Emily Baker, P.E., Deputy Director, Engineering, T&ES
William Skrabak, Division Chief, Environmental Quality, T&ES
Cindy Degrood, Chair, Environmental Policy Commission
Judy Noritake, Chair, Parks and Recreation Commission

**DRAFT ENVIRONMENTAL RESTORATION PROJECTS TO IMPROVE WATER QUALITY
CAMERON RUN - HOLMES RUN WATERSHED**

#	Restoration Name	Location	Description	Tierⁱ
1	Hoof's Run Stream Day-Lighting project	Northeastern Alexandria: between Maple and Walnut streets in Rosemont	Take a 1- to 2-block section of Hoof's Run that is currently under ground and remove its cover. This would be a one-time project with some continuing maintenance.	1
2	Cameron Run Habitat Restoration	Southern Alexandria: between Holmes Run and City boarder at Hunting Creek	The stretch of Cameron Run along the Eisenhower corridor is primarily a flood control channel. Habitat/stream restoration could make this portion of Cameron Run suitable habitat for many species. Restoration opportunities include deepening the southern 1/3 of the channel to create a deeper channel, while creating some wetlands along the northern portion of the channel. Many fish species, including anadromous species, cannot currently pass the five weirs on this stretch of Cameron Run. Various fish passage techniques may be implemented to allow both anadromous and non-migratory species the opportunity to establish a wider distribution.	1, 2
3	Strawberry Run Stabilization	Southern Alexandria: Begins in the Seminary Hills area and flows into Lake Cooke.	Strawberry Run enters Lake Cooke near Cameron Run. This small stream originates in the Seminary Hills area and carries lots of sediment to Lake Cooke. The restoration project would be to conduct bank stabilization and plantings to reduce sediment load to the lake and Cameron Run. This project would allow the City to team with the Seaport Foundation's efforts to restore Lake Cook. North of Duke St. (Franklin Parkway) "real restoration" to bring back natural stream characteristics.	1, 2
4	Old Holmes Run	Western Alexandria: In Dora Kelly Nature Preserve	Stabilize banks to prevent erosion and tree loss	1, 2
5	Old Holmes Run	Behind Beatly Library area (SW Alexandria)	Bring in a new base flow (naturally or artificially from a storm channel redirection).	2
6	Lake Cooke Restoration	Southern Alexandria: Adjacent to Cameron Run (north side)	In addition to Seaport restoration project. Sediment forebay (plunge-pool) to prevent Lake Cooke from having to be dredged so often. Plantings on City property.	2
7	Back-Lick Run Restoration	Southwestern Alex: Along rail corridor.	Along the portion within Alexandria. Stream bank stabilization. Cement channel that connects to Holmes Run could be enhanced to allow habitat and fish passage.	1, 2

#	Restoration Name	Location	Description	Tier ⁱ
			Reclamation of areas near Van Dorn Ave.	
8	Claremont Cove	Southwestern Alex: just south of rail corridor	A primary tributary and forested wetland area south of the rail corridor needs bank stabilization, revegetation, and wetland restoration. Good opportunity for natural area within the Eisenhower valley.	
9	Journal Papers Stream Restoration		Stormwater outfall redesign and energy reduction.	2, 3
10	Chambliss Street Storm water outfall	Northwest Alex: on Holmes Run.	2000 linear feet of stream needing restoration. Dora Kelly Nature Preserve behind Ford Nature Cr. Redesign stormwater outfalls in Dora Kelly Park.	2, 3
12	Forest Park	Central Alexandria	Stream bank stabilization (pull banks back). Wetland and vegetation stabilization along banks.	2, 3
13	Taylor Run	Chinquipin Park Area - Central Alexandria	Invasive/exotic removal within Chinquipin Park.	3
14	Potomac Hydrilla Recycling	Waterfront along Potomac River	Develop a consistent method of removing and reusing the hydrilla that accumulates along the waterfront. Possibly use as fertilizer? This would be a long-term, regular project.	2, 3
15	School/ Park Sites	Throughout the watershed	Retrofit for stormwater upgrades - green roofs, bioretention areas, structural BMP's, tree plantings	1, 2, 3
16	Fish Passage	Cameron, Homes and Backlick Run (Southern Alexandria)	Provide opportunities for fish migration throughout the watershed	2
17	Riparian Enhancement	Within every RPA, redevelopment examples: S. Pickett, Eisenhower	Make it a policy to strongly enforce reclamation (remove impervious surfaces) and enhancement of natural characteristics of buffer areas through the redevelopment process. Convert "landscape grassed" settings to more appropriate riparian habitat.	1,2,3
18	Urban Redevelopment	i.e. Landmark area	Require LID techniques such as green roof, bioretention, etc. to improve aesthetics and public awareness of water quality and quantity constraints. Make this an amenity opportunity rather than a punitive management activity.	1
19	Cameron Lake	Cameron Station	Explore if additional connections can be made. Can more drainage areas feed into it? Capacity?	1
20	Vulcan Retrofit	Backlick Run area	Encourage Retrofit with a wet pond	

#	Restoration Name	Location	Description	Tier ⁱ
21	Raleigh Parcel	South, Central Alexandria (Part of City's Open Space)	Explore Plunge pool/pond	1, 2

Endnotes:

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- Tier 1 – City Lead and Implemented (Primarily City Funding; nearly 100%)
 - Tier 2 – Partnering with City and other organizations (City funding about 50/50)
 - Tier 3 – Volunteer projects (City funding minimal, mostly small materials (plants, mulch, etc.) or City Staff time)