

CITY OF ALEXANDRIA

HOLMES RUN

MAINTENANCE POLICY AND PLAN

February 28, 2002





HOLMES RUN MAINTENANCE POLICY AND PLAN

BACKGROUND

In May of 1997, environmental groups and local citizens expressed concern regarding the "clear cutting approach" being used for the removal of the vegetation as part of the City of Alexandria's maintenance responsibilities of Holmes Run. As a result, maintenance activities were suspended and a study was initiated to evaluate alternatives for maintaining Holmes Run. At the request of the City, the Federal Emergency Management Agency (FEMA) hired URS Group Inc., an engineering consulting firm, to help the City to evaluate alternatives and develop a stream maintenance plan that balances the need to maintain the flood control function of Holmes Run while minimizing negative impacts on the environment.

The Holmes Run Maintenance Alternatives Study prepared by FEMA/URS was released to the public for their input and comments. Public meetings were held and comments on the study and its recommendations were invited. This final maintenance plan and policy takes into consideration comments, concerns, and suggestions from the stakeholders in the community.

PURPOSE OF THIS DOCUMENT

To develop a standing policy and plan for the maintenance of Holmes Run.

GENERAL POLICY STATEMENTS

- The Department of Transportation & Environmental Services (T&ES) recognizes that Holmes Run has many functions including: a floodway (flood control channel), a park and a valuable natural resource. The goal of this policy and plan is to balance the need to maintain the flood control function of Holmes Run while minimizing negative impacts on the environment.
- In an effort to protect public health, property and reduce the likelihood of flooding, the City adopted a floodplain management ordinance (Title 7, Chapter 6 Section 300). In addition, the City participates in the National Flood Insurance Program and as a result the City is required to maintain carrying capacity of the Holmes Run floodways. This program enables residents and businesses in Alexandria to purchase flood insurance.
- T&ES will take reasonable measures to reduce and minimize the impacts of the maintenance on the environment through proper planning, following best management practices and complying with all relevant local state and federal regulations.
- Where negative environmental impacts are unavoidable, appropriate environmental mitigation measures will be incorporated into the plan.

MAINTENANCE POLICY AND PLAN

There are three essential components of the maintenance policy and plan:

- a) Community Outreach**
- b) Planning**
- c) Implementation**

COMMUNITY OUTREACH

In an effort to keep the community and stakeholders aware of on going maintenance related activities, T&ES will continue its community outreach efforts similar to those used in the development of this document. T&ES will hold public meetings prior to significant maintenance activities to help educate the public about the need for the proposed maintenance and when and how the work will be implemented.

A mailing list will be maintained by T&ES Division of Environmental Quality of all the citizens, citizen groups and other stakeholders that were involved in the process to develop this plan and have expressed an interest in this issue. The mailing list will be used to inform stakeholders of any scheduled meetings, proposed maintenance plans and additional opportunities for community comment and input. Stakeholders will be invited to participate in the stream surveys to be conducted by the City and asked to provide input and comment whenever environmental mitigation is proposed.

Project signs will be posted along the stream before and while work is being implemented with a contact number, so that City staff can be notified if citizens see anything unusual or have any questions during the maintenance phase.

PLANNING

T&ES will conduct regular inspections of Holmes Run, most likely on an annual basis, to determine the need for maintenance. The goal of the inspections will be to determine the level of maintenance needed to maintain a manning's roughness coefficient of 0.055 for floodway bottom and 0.12 for the banks of Holmes Run. It is anticipated that some maintenance activities will occur every other year in the Holmes Run floodway. The plan is to perform maintenance more frequently, but the amount of work conducted at any onetime will be less and as a result the negative impacts will be minimized with respect to management of the vegetation. It is also anticipated, that periodically more substantive sediment removal will be needed, perhaps once every 3 to 7 years. This will involve removing larger sand bars and debris by using of heavy equipment in the floodway itself.

Major in stream maintenance work on Holmes Run will occur from November to February. This period of time is the least disruptive to the aquatic environment. Vegetation maintenance activities will likely occur in the same time frame as well, but are not restricted to these months.

Environmentally sensitive areas will be identified which may include concentrations of wildlife, native vegetation or valuable resources. For areas where beaver issues are identified, special consideration will be given and may include scheduling activities at times less disruptive to the beavers.

The first round of maintenance is planned for November 2002 to February 2003. Before each round of maintenance, an ecological walk through to identify sensitive areas and plants will be conducted with the interested groups using a Baseline Species Survey. The public will be invited to attend. This Baseline Species Survey will be conducted with the help and input of the City's Department of Recreation, Parks and Cultural Activities staff and others with expertise in plants and wildlife. The time frame for this activity will be from June 2002 to October 2002. This walk and its results will be used to identify areas that may benefit from the removal of invasive species, identify any sensitive areas that may need special consideration or protection during maintenance, identify any plants that may be transplanted, identify any locations where such transplanting may be done and identify potential mitigation sites.

To mitigate for tree canopy losses, the City will plant trees along Holmes Run above the bank outside the floodway. Other areas where tree planting will benefit the community at large may also be identified. When mature, these trees will provide shade to the stream and improve the riparian buffer along Holmes Run. Other potential mitigation measures include removing invasive species, transplanting vegetation, or other measures that will improve water quality. Access points may be left in place to enable better public access to the stream which can also be used as part of a water quality monitoring program. These activities will be coordinated with the Department of Recreation, Parks and Cultural Activities and stakeholders will have the opportunity to comment and provide input on the mitigation measures.

The Department of T&ES, Division of Environmental Quality will receive regular updates from Lake Barcroft Improvement District (the responsible party and the owner of Lake Barcroft Dam) concerning the condition and maintenance of the dam and follow up on any issues of concern. This will be done on an annual basis.

Based on inspections and ecological survey, a detailed plan will be developed at identifying specific areas and the maintenance that will be performed on them, the access areas and the staging areas. The plan will also require that a spill kit and absorbent booms be readily available in case there are any spills or releases.

The City will take photos of the existing condition of the stream, the maintenance activity and the post maintenance condition. The photos will be used in the future for training maintenance staff for such activities. The photos will also be used to evaluate the effectiveness of the maintenance activities.

IMPLEMENTATION

After it has been determined through the inspection process that maintenance is required, a detailed implementation plan will be developed consistent with the policies and plans outlined in this document. The implementation plan will take into account the results of the ecological survey, identify specific areas and the maintenance that will be performed on them, and identify the access areas and the staging areas.

The maintenance work in the Holmes Run floodway will be done in phases. In most cases, the first phase of the project will begin near I-395 overpass subsequent phases moving down stream.

All appropriate erosion control measures will be implemented. Work in the stream will be done on low flow days, and where possible, flows will be directed away from the areas of disturbance using temporary dikes or other means. Pumping around the work areas may also be used where feasible. The entry and exit points for equipment and vehicles to the stream will be carefully identified to minimize any disturbance. A spill kit and absorbent booms will be readily available in case of a release or spill.

Herbicide use will be severely limited. Only in places where the root structure of a plant is deemed to be compromising the structural integrity of the slope or embankment, localized use of herbicides may occur. Herbicides may also be used on a limited basis for the control of invasive species. In all cases, precautions will be taken to prevent any herbicides from entering the stream.

Based on the results of the environmental walk through, the sediment removal areas will be clearly delineated. Although most of the large sandbars obstructing the flows in the floodway will be removed, environmentally sensitive areas identified as a result of the ecological walk through will be given special consideration to minimize impacts. The staking or flagging of these areas will be done prior to the start of any ground disturbing or maintenance activities.

In some areas where large sand bars will be removed, the site will be graded such that the stream bottoms will take the form of mud flats during low flows. This will encourage these areas to be used as resting and feeding areas for birds and animals.

Based on the results of the Holmes Run Maintenance Alternatives Study conducted by URS, the following will be the general policy on the removal of the trees and vegetation from the stream bank slopes. Trees and vegetation will not be clear cut, but a more balanced approach will be used. The plan is to perform maintenance more frequently, possibly every 2 years, but the amount of work performed at any onetime will be less and as a result the negative impacts will be minimized.

- a) The bank slope will be divided into 3 zones. The bottom 3rd zone, middle 3rd zone and the top 3rd zone.
- b) The thinning out of vegetation will be progressively heavier closer to the bottom of the floodway.
- c) The top 3rd of the bank will be permitted to have trees and woody growth and will require thinning when the growth becomes extremely dense with multiple large trees in close proximity.
- d) The bottom 3rd of the bank will be cleared of any woody vegetation that does not yield or bend to water flows. Grasses and other vegetation that does not impede flows will not be disturbed.
- e) In the middle 3rd of the bank, trees and woody vegetation will be permitted. Select thinning will occur when the growth becomes moderately dense with trees and woody shrubs with a trunk diameter over 3 inches.
- f) Staff will use extreme prudence and judgement when making decisions as to removing trees and thinning vegetation. Staff will also take into consideration whether the vegetation is native to this region or invasive.
- g) Closer to the bridge openings, on the upstream and downstream side, the clearing will be progressively more and in all three zones.
- h) In areas where scenic views or overlooks have been identified or where public access to water is planned, some clearing in middle and upper 3rd of the stream bank may take place. This will be coordinated with Department of Recreation, Parks and Cultural Activities.

The trees or shrubs to be cleared will be clearly flagged before the crews start working. City staff will actively supervise the work crews to insure that only planned thinning and vegetation removal takes place.

Disposal of the materials removed from the Holmes Run floodway will be done in accordance with all applicable state and federal laws.

ENVIRONMENTAL POLICY COMMISSION (EPC) RESOLUTION
RE: HOLMES RUN IMPLEMENTATION PLAN
APPROVED JANUARY 27, 2003

WHEREAS, the City has enacted a number of ordinances and regulations, including the Flood Plain Management Ordinance (Title 7, Chapter 6 Section 300), to protect the life and property from flood damage, and

WHEREAS, the City's adoption of the Flood Plain Ordinance enables it to participate in the National Flood Insurance Program and thus enabling citizens of Alexandria to purchase federally backed flood insurance, and

WHEREAS, the City's Environmental Policy Commission's function is to advise and make recommendations to the City Council, and where appropriate, the Planning Commission and City Manager, on matters relating to conservation and protection of environmental conditions in the City, and

WHEREAS, in 1997, in response to the concerns from the community, the City suspended maintenance activity in Holmes Run that involved clear cutting of vegetation, and

WHEREAS, at the request of the City, the Federal Emergency Management Agency (FEMA) hired URS Group Inc., an engineering consulting firm to help the City to evaluate alternatives and develop a stream maintenance plan that balances the need to maintain the flood control function of the Holmes Run while minimizing the negative impacts on the environment, and


WHEREAS, public meetings were held on December 13, 2001, January 28, 2002, and February 28, 2002 to solicit comments on the findings of the alternative study and draft Holmes Run maintenance plan and a final "Holmes Run Maintenance Policy and Plan" was presented on February 28, 2002, and

WHEREAS, the EPC adopted a resolution on March 18, 2002 supporting the public outreach process used by the City to develop "Holmes Run Maintenance Policy and Plan," recognizing that the final plan strikes a good balance of maintaining functionality of the Holmes Run while minimizing impacts to the environment, and, the process of development of the Maintenance Policy and Plan was inclusive and took into account the concerns and comments of the stakeholders.

THEREFORE, BE IT RESOLVED that the EPC supports the implementation plan for First Quarter 2003.

BE IT FURTHER RESOLVED, to the extent possible, the EPC continue to be notified of anticipated future actions, activities such as stream walk throughs, and maintenance activities related to Holmes Run.

BE IT FURTHER RESOLVED, should the Department of Transportation of Environmental Services change the Policy and Plan in the future for any reason, EPC and other stakeholders who participated in the development of the Policy and Plan be appropriately consulted.



Cindy Chambers
Chair, Environmental Policy Commission