

# FALLS HILLS AND POPLAR HEIGHTS STORM WATER PROJECT

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## COLLABORATIVE ASSESSMENT REPORT AND RECOMMENDATIONS

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December 15, 2004

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### OVERVIEW AND INTRODUCTION

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In August 2004, Fairfax County hired RESOLVE, an impartial, private non-profit organization, through a contract with the Community Building Institute, to conduct a convening assessment to assess the issues, concerns, and interests about flooding on Venice St., Buckelew Dr., and Pinycastle Dr., and storm water management and water quality in the Falls Hills and Poplar Heights area. The County also asked RESOLVE to explore the feasibility of and develop recommendations for a consensus building process that would develop agreements on projects and activities to manage storm water and improve water quality in the area.

The impetus for a consensus-building project grew out of citizen opposition to a County proposal to cut down 4.5 treed acres for a storm water-holding detention pond in the Poplar Heights neighborhood. In response to public opposition, the County proposed a moratorium on the plan. The District Supervisor's office suggested that the community work collaboratively to develop an option that addressed the needs of all stakeholders. The County hired the Community Building Institute and RESOLVE to work with the citizens, Falls Church City, Northern Virginia Regional Park Authority, the Supervisor's office, the Storm Water Planning Division, and other County agencies to engage actively stakeholders in developing an agreement to address flooding and storm water issues.

RESOLVE's first step was to talk to people to understand more about the issues, challenges, and incentives to collaborate. This step is commonly called convening. In the convening phase of a collaborative process, a facilitator interviews parties to assess whether collaboration is appropriate or of interest to the parties. If parties are interested in a collaborative process, the discussions provide information on the possible structure and timeline for a collaborative process.

Overall, stakeholders supported a collaborative approach to developing comprehensive approaches to improve water quality and storm water management in Falls Hills and Poplar Heights. This multi-phased process could include:

- A *community wide opportunity* to learn about common neighborhood water problems;
- A *public involvement process* to build a common understanding of interests, concerns, goals, hopes and expectations, and to stimulate innovative thinking about how to solve issues. The public involvement process also would include opportunities to develop community alignment with the collaborative group's recommendations;
- A *technical advisory group* which would compile existing information and provide technical information to assess options and recommendations;

- A *small, collaborative group* to direct information gathering and technical analysis, explore options and alternatives, consider the benefits and consequences, and develop consensus recommendations that can be supported by the public, ratified by the County, and implemented effectively; and
- *Institutionalized distribution and access to constructive and credible information* for and by citizens to help create shared understanding of issues facing Falls Hills and Poplar Heights.

## PROCESS AND APPROACH

A convening process or feasibility assessment provides the opportunity for a group to gather information, learn about each other's interests, better understand the varying perspectives on critical issues and concerns, test assumptions regarding the anticipated barriers or obstacles, and begin to develop a range of ideas and suggestions for addressing the identified issues and concerns.

From late August through October, RESOLVE designed and prepared discussion question, a process to talk to people, and a schedule for this project. Juliana Birkhoff, RESOLVE Senior Mediator, spoke to Community Building Institute staff, County Department of Public Works Staff, Providence District Supervisor's office staff, and community associations to determine hopes and expectations for the assessment process, identify expected topics to cover during discussions, and ask for input for developing a list of proposed individuals to interview. The list was not meant to be comprehensive; it was a sample that represented the range and diversity of perspectives about Falls Hills and Poplar Heights storm water issues. Based on the input received, we developed a list of questions to cover in our discussions and a proposed list of people to contact.

In early October, RESOLVE began conversations with interested parties. During our discussion, we asked people to suggest anyone else we should talk to. Based on the suggestions from people on the initial list, we talked to many additional people. The RESOLVE Team<sup>1</sup> talked in person or on the phone to approximately 50 people.

The RESOLVE team used the same set of questions to guide our conversations, but also followed up on what each person or group thought was most important to talk about (*see Appendix B*). During each conversation, we learned about people's perspectives, the depth of their commitments to the issue, as well as their understandings of the challenges and complexity. Interviewees were considerate in the time and attention, they provided during the interview, their preparedness for the conversation, and their willingness to be forthright, engaged, and constructive in their comments and remarks.

During the discussions, we were especially interested in identifying any similarities and differences of opinions on topics. We looked for areas of commonality and convergence as well as areas of divergent or polarized opinions. Interviewing a range of parties also helped us understand and analyze the likelihood of sufficient threshold interest to help us design and implement a process that could address the widest range of interests, and which had a high likelihood to achieve success.

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<sup>1</sup> RESOLVE Senior Mediator Juliana Birkhoff, and Associates Brad Spangler and Stephanie Nelson.

This collaborative assessment report and recommendations provides the summary and highlights of the conversations. No confidential information is included in this report, nor are any names attributed to statements expressed in discussions. This report also includes our collaborative process recommendations based on our summary and analysis. Our recommendations are for consideration by all stakeholders. This report is being distributed to the individuals listed in Appendix A to share this information widely, to receive any feedback on recommendations, and to provide an opportunity to correct any errors.

## **DESCRIPTION OF THE FALLS HILLS AND POPLAR HEIGHTS AREA**

The Falls Hills and Poplar Heights neighborhoods are bordered (roughly) by Route 7 on the North, I-66 on the North West, Fairwood Lane on the south, and West St. on the East. Shreve Road and the Washington and Old Dominion railroad separate the two neighborhoods. The area is not in Falls Church City or in Vienna City, but in an unincorporated Fairfax County area.

Both Falls Hills and Poplar Heights are surprisingly hilly, compared to the surrounding area. The terrain varies from 450 ft to 350 ft. The area is at the very edge of the Cameron Run Watershed. Tripps Run forms the lowest point in the two neighborhoods, and like Shreve Road and the bike trail, divides the two neighborhoods. Both neighborhoods have landscaped yards with large trees.

Houses in the Falls Hills area tend to be middle sized and two stories. Most of these houses were built in the 1950's. A large development, Highland View Estates was built in 2001. Houses in the Poplar Heights neighborhood vary more, with both older, smaller two story frame houses, one and a half story brick houses, and much larger homes, typically built as infill developments.

Streets in Poplar Heights are narrow, twisting and with many cul de sacs and dead ends. Few streets have sidewalks. Several streets in Poplar Heights have traffic calming structures. Falls Hills streets tend to be slightly wider, but are also laid out with twists and cul de sacs. More streets in Falls Hills have sidewalks than in Poplar Heights.

Most residents in the Falls Hills neighborhood are in the Shreveview Elementary, Joyce Kilmer Middle, and George Marshal High School District. Most residents in the Poplar Height School District are in the Timber Lane Elementary School, Longfellow Middle School, and McLean High School District. Both neighborhoods have active civic associations.

The Falls Hills and Poplar Heights neighborhoods are in the Providence Magisterial District of Fairfax County. Linda Smyth is the Providence District Supervisor. Steve Shannon represents Falls Hills and Poplar Heights (35th District) in the Virginia House of Delegates. The Area is in the 8th Congressional District, represented by Jim Moran.

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## **SUMMARY OF ASSESSMENT DISCUSSIONS**

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People expressed a wide range of opinions and perspectives during our conversations. Some overarching themes wove their way into our conversations. We summarize those themes here to provide a context for this portion of the assessment. Most people expressed considerable frustration with how storm water and storm water problems have been handled in Falls Hills and Poplar Heights. People were frustrated at the County's lack of communication, lack of public involvement,

and, especially, with the current stalemate. Most people were interested in participating in a collaborative process, but many were dubious about success in resolving the issue. However, people also wanted constructive change and more productive community building activities. Some liked the idea of a demonstration storm water stewardship project that the County could replicate in other neighborhoods.

Many mentioned the importance of defining and framing the problem carefully and with community input. People also wanted the problem solving process to integrate with other planning, storm water, and watershed planning processes.

### **LEARNING ABOUT STORMWATER ISSUES IN FALLS HILLS AND POPLAR HEIGHTS**

Many residents in the area have lived in the Falls Hills/Poplar Heights area for many years. We talked to several people who lived in or up the street from the house in which they had grown up. Other residents have lived in the area for 15-20 years. These residents told us about changes in storm water amount and direction, and changes in Tripps Run condition.

Residents told us that when they first moved into the area Tripps Run had minnows, turtles, salamanders, snakes, and frogs. They said now they rarely see any animals in Tripps Run. Several residents said when they first moved to the area or when they were children, the banks of Tripps Run were six inches to a foot deep. There were many trees and bushes along the stream. Now the banks are eroded, tree roots are exposed, and the banks are three to four feet deep.

Many residents in Falls Hills and Poplar Heights have storm water management problems. These storm water problems have been going on for years. Residents told us about floods in the 1970's, 1988, and 1990's, as well as the large flood in 2001. Several people noted that their parents or in-laws had dealt with water problems in the area by building French drains, installing sump pumps, or extensively re-grading yards. In discussions, we learned that after the hurricane in 1988, when Claremont Street was described as a river, many of the homeowners on Claremont Street installed French drains and sump pumps. We also heard about flooding in the area after a large storm in January 1996. People said that they had heard neighborhood stories that the Falls Hills and Poplar Heights area has always been prone to flooding and that when the houses were built on Venice Street there were discussions about potential flooding problems.

Several people told us that they had complained to the Fairfax County Stormwater Division before the flood in 2001 about erosion on Tripps Run, the lack of storm drains, and inadequate maintenance of storm water structures. Many people felt their requests, warnings, and complaints had been ignored. People felt that Stormwater Planning engineers had not been sensitive to their complaints. One person said County engineers explained that his house served as the dam for his neighbours' storm water. People said engineers told them that their problems were not significant enough for the County to worry about them.

Many of the people we talked to explained that the problems have gotten worse, particularly after the construction of the Highland Estates development. The Highland Estates development was under construction in 2001 when the most significant flood occurred in the area. The flash floods on August 11 hit an area from Warrenton, Virginia, through Fairfax County, and extended into

northern D.C. Up to 7 inches of rain fell in a very short period. There was also lightening and strong winds (NOAA).

In our conversations, people told us that storm water very quickly overflowed the streets, inlets, and storm drains. Rain and storm water rushed down Claremont, Barbour, Virginia, Caron, and Pinecastle Drive and collected along Venice Street.. It similarly rushed through the Poplar Heights neighborhood, flooding houses on Hughes Ct., Gordon's, Buckelew, and Poplar Drive.

The storm sewer system for Falls Hills comes together behind Venice Street before storm water flows through a culvert in the W.O.D trail embankment. Venice Street residents described how the manhole cover erupted off the storm structure and was thrown several feet away. The water backed up west from the W.O.D trail, uphill through back yards into front yards to flood Venice St. Several houses on Venice Street had between three and eight feet of water in their yards. The storm water flooded basements and first floors on Venice Street through back doors, front doors, and window wells. Several residents on Venice Street whose property borders Tripps Run had between one to four feet of water in their first floor. The water also flooded garages on Venice St. At least one car parked outside on Venice Street was lifted by the storm water and floated down the street.

We heard in our discussions either that the County cleared the debris blocking the culvert under the bike trail and the storm water pipes, or that the force of the storm water burst through the culvert to Shreve Road. Several people we interviewed explained that during the storm, storm water shot out of the W.O.D. culvert, arcing three to four feet over Shreve Road, and flooding Shreve Road for several yards with water that was three to four feet deep. Storm water flowed north along both sides of and over Shreve road into Tripps Run, flooded Tripps Run, and severely eroded properties along the stream. Trees were undercut by the storm water and fell into Tripps Run.

The County agreed to address the storm water problems that led to the extensive flooding and property loss in 2001. We heard in our discussions that the Stormwater Planning Division contracted with Dewberry and Davis to study the situation, and suggest and rank alternatives to deal with the flooding problem. Dewberry and Davis outlined 19 alternatives and ranked the alternatives by how effectively they would reduce flooding, whether the alternative would have downstream impacts, what it would cost, and how feasible it was. Based on these criteria, the County chose to explore three alternatives: building a culvert to extend under the W.O.D. Trail embankment and Shreve Road, developing an open trench in the W.O.D. trail embankment with a pedestrian bridge, and building an additional culvert under the W.O.D. trail embankment. Dewberry and Davis also assumed they would excavate the area between the Venice Street properties and the W.O.D. trail embankment to maximize storage (T02-01 Venice Street Drainage Improvements, Phase I-Assessment Final Report).

Dewberry and Davis then presented the plan to different groups to receive input. The Northern Virginia Regional Park Authority suggested minor improvements to the design. The City of Falls Church was very concerned that the designed alternative would produce increased flow and run off. The City of Falls Church objected to the increases in peak flow rates. A group of residents preferred the alternative of building a culvert under the W.O.D. trail embankment and Shreve Rd.

Because the City of Falls Church would not allow any increase in storm water peak flow, Dewberry and Davis also investigated the possibility of a storm water management facility. The County then began to explore legal questions about discharging more storm water to Falls Church

City and the reaction of the Poplar Heights Recreation Association Board to the proposal to build a storm water management facility on their property. The County met with the Poplar Heights Recreation Association Board. We learned in our discussions that the Poplar Heights Recreation Association Board opposed constructing a storm water management facility on their property. Similarly, many residents told us they opposed cutting down trees on the pool property to build the storm water detention ponds.

Most of the residents we interviewed in Falls Hills, Falls Church City, and Poplar Heights were opposed to the County's proposed plan. They felt that they had not been consulted and that the process and criteria for choosing the preferred storm water management alternative were not understandable or transparent. This opposition culminated in a public meeting in summer 2003 at George Mason High School. Because people were so opposed to the plan, then supervisor, and current County Board Chair, Gerry Connolly and County Stormwater Staff proposed a moratorium on the plan.

In establishing the moratorium, the County curtailed pursuit of the proposed storm water detention pond and stopped all non-emergency actions related to storm water problems in the Falls Hills and Poplar Heights neighborhoods so that existing problems would not be unintentionally exacerbated. The moratorium was intended to provide an opportunity to think through how to best approach this challenge.

Recognizing storm water as a Countywide issue, Fairfax County officials and Providence District Supervisor Smyth's office decided that the Falls Hills and Poplar Heights area presented an opportunity to determine a new set of options for addressing the problem, which could potentially be applied throughout the County. The Providence District Supervisor's office recommended addressing storm water and water quality problems comprehensively in Poplar Heights and Falls Hills. What seemed most appropriate was to create an opportunity for community residents from all of the sub-areas to join with the County and work to build a consensus plan that would meet interests, concerns, and goals within and among each of the neighborhoods as well as the County's interests. The moratorium was meant to allow time to thoroughly identify all water problems in the area and seek community consensus on how to address them.

## **IDENTIFYING INTERESTS OF RESIDENTS AND STAKEHOLDERS**

Interests are the underlying reasons people want what they want or value what they value. In our interviews we asked people what issues were important to them and why they were important. We also asked people what a successful outcome would be from a collaborative process. From responses to these questions, we learned about what people desired and what their reasons were for the positions they had taken on storm water issues in Falls Hills and Poplar Heights. Collaborative processes are more successful if they can address a wide array of people's interests.

We heard from many people that the storm water situation in Falls Hills and Poplar Heights disturbed their sense of fairness. Several people felt that the County had neglected its responsibility to manage storm water effectively. This perceived negligence created risks for them even though they had nothing to do with causing the risk. Others felt that it was unfair that several homeowners bore the costs and disruption of a Falls Hills and Poplar Heights wide problem. Finally, several people felt that it was unfair that the proposed solution to a community wide storm water problem affected only one property owner - the Poplar Heights Recreation Association. People told us they

were looking for a process and an outcome that was evenhanded and that distributed risks and benefits fairly.

In our discussions, many people expressed their interest in protecting and improving the ecology of Falls Hills and Poplar Heights. Most importantly, people valued the ecological benefits of the trees and bushes on the Poplar Heights Pool property. Many people were motivated by ecology interests in their opposition to cutting down the trees on the Poplar Heights Recreation Association property. Many people remarked on how much top soil and plantings they had lost in recent floods and how that degraded their yards and added sediment to Tripps Run. They expressed concerns about soil conservation and erosion. Several people wanted to contribute to Chesapeake Bay health and others told us that they were interested in a solution that improved water quality and habitat in the Tripps Run area. People also told us they were excited about being involved in testing low impact development techniques to control storm water.

Many people mentioned concerns about the financial affect of the storm water problem and possible financial affects from any solutions. Homeowners who have had flooding problems are looking for a solution that restores the financial benefits from their property. Many homeowners whose houses have flooded are worried that they cannot sell their houses, but continue to pay large tax bills. Other people have made significant investments of their own money to re-grade yards, shore up stream banks, and flood proof homes. They are interested in solutions that do not make their investments in their property pointless.

Several people we talked to are concerned that whatever storm water solution is created ought to be regarded as an experiment that does not create commitments or precedents. Some people want to see the project as a pilot that can serve as a model for other communities. They hope that the Poplar Heights and Falls Hills neighborhoods can work together voluntarily and collaboratively and that what is developed locally can serve as a model for how other communities can tackle the same problems. However, they are hoping that the level of effort and funding from the County would not be seen as necessary for other neighborhood storm water problems.

The desire to have local control and to further neighborhood unification also shaped many people's interests in the storm water problems. Residents in Falls Hills and Poplar Heights are concerned about their neighborhood and want to have a say in what happens there. Further, people were distressed that Falls Hills and Poplar Heights neighborhoods felt divided by the way the County had communicated with them and by the decision making process. Many people we talked to hoped that the solution and the collaborative process could involve local ideas and information at the same time it brought the two neighborhoods together.

As we talked to people, we heard many comments about the County's responsibility to adhere to national, state, and county storm water and clean water regulations and standards. Many people we talked to want the storm water management solution to be guided by best practices, standards, and regulations. Although people want a solution that meets the needs of the local community, they also want to ensure that the County can and will create a storm water management infrastructure that matches standards and regulations.

Finally, a few people expressed an interest in ensuring that any solutions protected or advanced the beauty of the area. These people noted that the stream, wooded areas, and landscaping added to

their enjoyment of the area. They disliked the idea of looking out at a landscape with fewer trees and with industrial looking storm water detention ponds.

In our discussions, we also heard about issues or topics that need to be addressed in a collaborative process.

## UNDERSTANDING MAJOR ISSUES AND TOPICS

During our conversations, we asked people to share their perspectives on the major issues and topics that need to be addressed to resolve storm water problems. We heard a long list of topics, issues, and concerns. We heard more issues and topics at two community meetings on December 1 and December 4, 2004. We have grouped the issues below into general categories, but recognize that the issues are connected.

### STORM WATER ISSUES

- 1) *Storm Water and Personal Property* Flooding and storm water damage to yards, basements, first floors, driveways, and personal property is a significant issue. Water collects in yards and other outdoor areas, and forms ponds of standing water that do not drain quickly. Many people in Falls Hills and Poplar Heights are concerned that storm water and drainage problems limit their use of their property. Some residents' property values have been significantly reduced due to flooding problems. In addition, FEMA characterization of properties affects property owners financially.

Residents are also concerned that storm water is damaging roads and sidewalks in the area. We also heard concerns that many streets do not have storm water drains or inlets. Several people told us storm water is entering sanitary sewer pipes and causing backups at some manholes and in some basements in the area. People are concerned about health effects. Many people described drains or pipes that consistently overflow or back up leading to storm water run off problems, usually outdoors but also indoors.

- 2) *Storm Water and Tripps Run* The banks of Tripps Run are severely eroded. The storm water undercuts many trees along the banks and several have fallen recently. People are also concerned about water quality in Tripps run from sediment, pesticides, fertilizers, and other pollutants from storm water run off.
- 3) *Development Impacts* Highland Estates storm water plans and compliance with best management practices is a significant issue for many. Houses, roofs, driveways, and parking lots contribute to storm water run-off so new development continues to aggravate storm water run-off problems. Potential widening of I-66 and/or I-495 threatens to exacerbate existing problems. Can further "importation" of water from other areas be prevented?

## STANDARDS AND BEST MANAGEMENT PRACTICES

- 4) *How Much Water Needs to Be Controlled?* Is the County creating storm water infrastructure to limit damage from 10, 25, 50, or 100-year flood? Is the County controlling for 24-hour event, microburst, or regular storms?
- 5) *Public Facilities Manual, State, and Federal Regulations* What does the public facilities manual suggest or allow? Have there been recent revisions to the County codes? What are the other regulations or standards the County has to comply with? The County needs to reconcile County codes and responsibilities with State regulations. To what standards, practices, or regulations are new developments (under construction) accountable? Could the project develop a storm water best management practices guidebook for new site development?
- 6) *Are Current Standards and Regulations Enforced?* There needs to be enforcement checks of storm water management measures at new developments to ensure compliance (e.g. Highland Estates). What sort of storm water management practices are used around I-66 and I-495?

## ALTERNATIVES TO ADDRESS STORM WATER PROBLEMS

- 7) *Increase Capacity And Improve Engineering Of Current Storm Water Infrastructure* Can streets be retrofitted or "grandfathered" into storm water system to build inlets, storm drains, and other storm water structures? Can the County improve drainage in the system without constructing a storm water pond?
- 8) *Low Impact Developments* Can the County and the neighborhoods install rain gardens and bio-retention structures, rain barrels, porous pavement, smaller impoundments in the area to slow down and retain the water higher in the sub-watershed? If you looked at all homes and properties as an opportunity to develop solutions could you control enough storm water? Could changing thinking about yard maintenance include more opportunities to manage storm water?
- 9) *Purchase properties* Some suggested that the County buy homes along Venice Street that are prone to flooding and use the vacated Venice Street area for storm water storage.
- 10) *Flood proof homes* Would it be possible to flood proof all the homes that are prone to flooding or that have a history of flooding?
- 11) *Storm ponds* Construct storm water detention ponds in an area that the Poplar Heights and Falls Hills residents choose.

## RESOURCE AND TIMELINE ISSUES

- 12) *Resources for Information for Collaborative Problem Solving* Are there funds to support establishing contact with various governmental and non-governmental organizations that can provide useful information for the process – EPA, Chesapeake Bay

Foundation, Potomac River Greenways Coalition, Fairfax County Environmental Planning, independent environmental engineering firm? Can the County use their GIS capabilities to create a “geocoding” map that illustrates the storm water problems in the area?

- 13) *Resources to Fund Storm Water Solutions* Are there County funds to develop all different kinds of storm water management structures or just some? Can the community get funds from federal government or other grant sources?
- 14) *Resources to Maintain Community Storm Water Management Infrastructure* What sorts of resources are available for continued maintenance of implemented solutions, particularly those at scale of individual properties (e.g. LID)? Is it possible to establish tax or insurance incentives for implementing storm water management measures on private property?
- 15) *Time Line* Does the community need to wait for Stormwater Needs Assessment, Cameron Run Watershed Planning Process, changes to the Public Facilities Manual to address problems?

#### ACCOUNTABILITY AND LIABILITY ISSUES

- 16) *Maintenance* If community members developed structures or low impact developments, who would be responsible for maintaining them?
- 17) *Liability* If storm water management structures, low impact developments for example, were on private property what would be the County's liability?

#### **BARRIERS AND OBSTACLES TO ADDRESSING THE ISSUES AND CONCERNS**

This section outlines challenges, barriers, and obstacles to addressing the issues and interests in storm water problems in Falls Hills and Poplar Heights. This section provides information to clarify what it will take to overcome and address these challenges, as well as a baseline to assess the likelihood of achieving the objectives of a collaborative process. The following list summarizes substantive, relationship/communication, and process barriers identified during our discussions:

#### SUBSTANTIVE BARRIERS

- 1) *Complexity of issues*- How could credible scientific and technical information about storm water flow and information about the impact and effectiveness of different alternatives, some of which are experimental or context specific, be gathered? What/where is the distinction between storm water and ground water? How should the process integrate local information with County and Falls Church City information about storm water?
- 2) *Framing*- How could a collaborative frame the issues and the problems so it has enough scope to permit problem solving and agreements, but is not so large that stakeholders feel disengaged?

- 3) *Issues*- How would a collaborative group prioritize, narrow issues, and focus to get something done? How could it develop a strategy to sequence issues that will encompass differing agendas?
- 4) *Legal/statutory issues*- Where will the community's or collaborative project's authority come to implement agreed-upon approaches? How will the project resolve the possible financial issues and responsibility for implementation?
- 5) *Competing interests*- How could the need to protect property from flooding and community interests in maintaining trees be balanced? How could interests be balanced between local collaborative solutions and processes and adhering to County or State standards?

#### RELATIONSHIP/COMMUNICATION BARRIERS

- 6) *Generalized Distrust*- The trust between the County and citizens is low and the County has lost credibility. Citizens are suspicious of motives and worried about County development plans. Some residents did not know about flooding problems or easements when they bought their property that led to distrust. Poplar Heights residents perceive that the County treats them differently than they treat Falls Hills residents.
- 7) *Misunderstandings and misperceptions*- Falls Hills residents perceive that Poplar Heights residents do not appreciate Falls Hills problems. Poplar Heights Recreation association members feel some parties do not acknowledge the financial and non-monetary value of their wooded property.
- 8) *Lack of Coordination and Communication*- Lack of institutionalized coordination and communication between VDOT, City of Falls Church, Northern Virginia Park Authority, and County government is an area of concern.
- 9) *Lack Of Transparency In Decision Making*- Citizens perceive that the County makes decisions without involving them and without clear criteria or decision-making processes.

#### PROCESS BARRIERS

- 10) *Lack of Data Credibility*- Not all people trust sources of information and consultants used by the County. Access to information and clear communication has been problematic and could represent challenges, as could finding and using experts that are credible to all.
- 11) *Politics*- Political changes can create instability for forming, ratifying, and implementing potential agreements.

- 12) *Agencies*- Internal organizational issues and internal policies may make it difficult to address issues holistically. Internal storm water planning processes in flux may make decision making on this project difficult.
- 13) *Resources*- The lack of sufficient resources to implement storm water management solutions and the overall lack of resources to handle storm water problems may make allocating resources to the two neighborhoods difficult.

### **CONSEQUENCES OF THE “STATUS QUO”**

In our discussions, we also heard from people what the consequences would be of maintaining the status quo as opposed to beginning a collaborative process. We explored these thoughts to understand people's perception of a collaborative process and its likelihood of success. Part of this analysis is to understand the “fears or worst case scenarios” if no action is taken to implement some type of collaborative process for developing a solution to the storm water problems. It helps to find out whether participating in a collaborative process is likely to result in equal or better results than not doing so; and thus, whether it is worth people’s time, effort and resources. The following list highlights the perceived consequences of continuing with the status quo approach:

- Continued flooding would occur due to rainfall or increased run off from development, and the possibility of an expensive and disruptive event would remain.
- Tripps Run and surrounding private property erosion would cause further deterioration of the watershed and environmental degradation.
- Discord, deterioration of relationships, bad decisions, finger pointing and blaming behaviors, citizen morale issues, and vocal and divergent viewpoints would persist.

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### **RECOMMENDATIONS FOR A COLLABORATIVE PROCESS TO ADDRESS THE ISSUES AND CONCERNS**

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We asked general questions in our early discussions about which process or approach would be most useful in addressing the identified issues and concerns. We presented several ideas at the December 4 community meeting and heard feedback on our proposed approach. We also received feedback from people after the December 4 meeting. People offered us their suggestions for what approaches made the most sense to them as well as what would not be considered a useful or constructive approach, and why.

#### **USE A MULTI-FACETED APPROACH**

Almost everyone we talked to was opposed to “unstructured public meetings.” They were perceived as a waste of time, too unfocused, adding to rather than diminishing public confusion, likely to exacerbate emotional issues, and which might demonstrate a lack of leadership and preparation.

People we talked to were also leery of an “advisory committee.” People were worried that advisory committees tended to create many meetings that were not focused on immediate problem

solving. People said that in Fairfax County advisory committees develop advice and recommendations that tend not to be listened to or used.

In our discussions and in public meetings people supported a multi-phased approach to 1) quickly develop agreements; 2) integrate local knowledge with broadly acceptable scientific and technical advice and feedback on options; 3) support public education and communication; and 4) develop relationships and structures for longer term community stewardship of storm water solutions. We recommend, first, an opportunity for the community to learn about common neighborhood storm water problems and approaches to address them. The second step would be to organize a representative group to develop options to solve the storm water problems. This small, collaborative group would analyze the options and alternatives, consider the benefits and consequences, and develop consensus recommendations that can be supported by the public, ratified by the constituent entities, and implemented effectively.

The third step would occur at the same time. A technical advisory group could compile the existing information on the area and the problem and could evaluate approaches to solving the problems.

Finally, because the broader public is interested in the outcomes and concerned about transparency, we would organize a public involvement process to provide organized feedback at several critical points during the process. This would build legitimacy and support for whatever recommendations are developed.

### **LINK THE FACETS TOGETHER**

The following section provides more details on the proposed approach. Our proposed approach will integrate the common themes and interests of the interviewees.

#### **1<sup>ST</sup> STEP: COMMUNITY OPPORTUNITY TO LEARN**

The community began much of this learning on December 1 with the leadership of the Falls Hills and Poplar Heights Civic associations. However, we expect that we will need at least two more community learning opportunities. The first one would be to learn where storm water comes from, where the elements are for current storm water infrastructure, and how the system currently works. We suggest that this step should involve some neighborhood walks and visits to specific sites. This will give the community a common basis to understand exactly the nature and extent of storm water problems. The second community opportunity to learn would involve learning what the options are for storm water management in the Falls Hills and Poplar Heights area and how much water each could handle. We could conduct this in collaboration with a number of other organizations who have a community environmental education mission. We expect that this would involve presentations followed with opportunities for questions and discussions. Alternatively, we could plan presentations with small break out groups for questions and discussions.

#### **2<sup>ND</sup> STEP /CONCURRENT: TECHNICAL ADVISORY GROUP**

After the collaborative group frames and defines the issues for problem solving, they would direct a technical work group to help them learn about the storm water problems in the area, what

the options are, and what the technical merits are of different options. Additionally, the collaborative would develop issues that technical advisors could first analyze in an informal workgroup setting and then propose various scenarios back to the group for consideration and collaborative decision-making.

### 3<sup>RD</sup> STEP/CONCURRENT: REPRESENTATIVE GROUP COLLABORATIVE/CONSENSUS PROCESS

Groups choose to use consensus decision-making approach when there are divergent viewpoints and issues, and it is anticipated that they will need time to synthesize complex information and strategize together. This type of process can provide groups with an opportunity to develop goals and guiding principles; address challenges, obstacles, and barriers; and provide a structure for decision-making. With careful planning and process, a representative group could create agreements that would be supported by the public, ratified by political entities, and effectively implemented.

Implementing a number of initial process step recommendations can create a greater likelihood of success. Such factors include: at the beginning of the process, the group should develop and agree on a joint problem statement; develop and agree to proactive ground rules and operating principles; agree as to what issues will be “on or off the table”; and decide between a broad inclusive focus or a narrow exclusive focus. The group should also consider whether a neutral facilitator would be useful and agree to provide for accountability, visibility, transparency, and fairness of the process.

This group will likely be considering science and technical information in a public policy setting. As such, it will be important for the group to generate questions for the technical advisory group. The collaborative group should drive the information synthesis and options modeling for the technical advisory group. This will ensure that the information generated in Step 2 provides a foundation for good decision making.

To ensure that the collaborative group uses its time discussing problem definition and problem solving, we propose organizing a small steering committee that will organize meeting agendas and keep the process moving forward.

### 4<sup>TH</sup> STEP / CONCURRENT A PUBLIC INVOLVEMENT PROCESS –

During the assessment process, it became apparent that there was interest in a collaborative process and for broad public outreach and education. People told us how miscommunication, lack of communication, and lack of consistent information had created barriers to solving this storm water problem. There is a need for constructive and credible distribution and access to information for and by citizens, education, and participation to help create shared understanding of issues facing Falls Hills and Poplar Heights, and opportunities to develop community alignment with the processes recommended above.

It will also be critical to raise awareness; to keep the public informed, energized, engaged, and “on board” with the collaborative process throughout; to ensure that the broader community’s perspective is understood, useful, relevant, and heard; to show that ideas are considered; and to develop buy-in and support for the collaborative groups proposals and ultimate consensus-based recommendations. Effective tools to consider include using media contacts, websites, and newsletters.

This phase could also involve a larger number of participants and would occur at two to three critical junctures when broader citizen input was important to move forward. Participants would be asked for feedback on how the storm water problems to be solved are framed and the criteria for developing good solutions. Finally, they would be asked to provide feedback and improve on proposed recommendations to solve storm water problems.

#### LINKING THE PROPOSED PROCESS WITH OTHER WATER PLANNING EFFORTS

Fairfax County is currently engaged in several advisory committee, strategic planning, and watershed planning processes. It will be essential to plan, strategize, and decide how best to inform, link, and coordinate the various water-related processes to provide for effective, complementary outcomes in each process. At some point, there may even be options for consolidating the various efforts; ongoing coordination will help determine when that becomes a plausible alternative.

#### **ENSURE BALANCED REPRESENTATION**

During the convening interview process, there were criteria offered that could help determine appropriate and credible representation including individuals who would be: constructive, innovative, willing to work as a group not individually, offer fresh perspectives, diversity of opinion and representation of a constituent group. Certain interviewees stated that it was time for new people to take on this issue and suggested they *not* participate in the process. They stated that their efforts were worthwhile but they were ready to step aside and let others provide leadership and advocacy. For the proposed collaborative process, there were a number of categories of representation that consistently were named during the convening interview process. We propose the following participants for the collaborative group.

#### **COLLABORATIVE GROUP**

##### GOVERNMENT REPRESENTATION:

- Supervisor's Smyth's office
- Virginia Department of Transportation
- Northern Virginia Regional Park Authority
- Falls Church City
- Department of Public Works, Stormwater Planning Division
- Stacy Sloan Blersch, US. Army Corps of Engineers

##### LOCAL REPRESENTATION

- Falls Hills Civic Association
- Venice Street Property Owners
- Poplar Heights Civic Association
- Poplar Heights Recreation Association

- Local Environmental NGO (Jeannette Stewart, EcoStewards Alliance)

### **STEERING COMMITTEE**

- Falls Hills Civic Association
- Poplar Heights Civic Association
- Supervisor's Smyth's office
- Department of Public Works, Stormwater Planning Division

We also heard suggestions for people with technical expertise. We propose the following for the Technical Advisory Group.

### **TECHNICAL ADVISORY GROUP**

- Mark Sutherland, Versar
- Paul Makowski, Dewberry Davis
- Assad Rouhi, Northern Virginia Soils and Conservation District
- Mr. Hani Fawaz, Fairfax County Land Development Services
- Don Demetrius, Stormwater Planning Division

Several other groups were mentioned in meetings and interviews. We will invite these groups to participate in community meetings and to provide technical information.

### **OTHER GROUPS**

- Highland Estates
- Falls Court Townhouses
- Fairfax County Sewer Authority
- Shrevewood Elementary school

## **IMPROVE CREDIBILITY OF INFORMATION**

Stakeholders had a range of perspectives about the use and need for information and data in this process. Some stated that there were no data gaps, asserting that the storm water problem is simple and the infrastructure just needs to be fixed. Others perceived that the sources of data are sometimes not credible, and had issues about accessibility to data. However, everyone agreed that it is essential to have credible and believable scientific and technical information, that the interpretation and consistency issues needed to be resolved, and the process needs to be developed to use all the available information.

To improve the use of information and data in any of the proposed processes, it is recommended that groups be explicit about what is known and not known, explain the uncertainties and why they exist, and agree to accept and respect what is presently unknowable. Additionally, the willingness to listen and learn (taking time at the beginning of the process to understand and educate each other on issues), and the importance of developing a range of options and alternative approaches before deciding how to solve problems will increase the likelihood of reaching credible, resilient, and mutually acceptable outcomes.

It may help to offer a process orientation to inform and educate people; to hear issues from a different perspective; and to outline a credible, mutually agreeable method to interpret and analyze data.

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## SUMMARY AND CONCLUSION

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In conclusion, this collaborative assessment report and recommendations summarized the highlights of an informative, constructive, and productive learning process. Participants were forthright and open about their hopes and expectations as well as with their fears and concerns. The information gathered provided significant challenges for synthesizing, analyzing, and recommending process options. We believe that that people are both motivated and interested in participating in a multi-faceted approach, significantly increasing the likelihood of its success. It is hoped that this report can assist in providing useful options and alternatives for consideration.

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**APPENDIX A: PARTICIPANTS**

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Listed below are individuals who were interviewed or provided information at community meetings.

N A M E	A F F I L I A T I O N
Michael Aho	Providence District Board of Supervisors
Joe Bared	Citizen
Nathanial Bawcombe	Fairfax County Department of Public Works & Environmental Services
Stacey Sloan Blersch	USACE Baltimore District Planning Division
Car; Bouchard	Fairfax County Department of Public Works & Environmental Services
Robert Beek	Citizen
Igor Belousovitch	Citizen
Andrea Blakemoore	Citizen
Nick Byrne	Citizen
Florence Cavazos	Citizen
Fernando Charro	Venice Street Homeowner
Michael and Jane Checkan	Citizen
Larry Coffman	Citizen
Al Copley	Citizen
R. Cunningham	Citizen
Jonathan Daw	Citizen
David Dexter	Citizen
Desmond Dinan	Venice Street Homeowner
Bob Etros	Water and Sewer Department, Falls Church City
Jim and Lisa Ferguson	Citizen
Steve Fuss	Citizen
J. Garcia	Citizen
Lois Gibbs	Poplar Heights Civic Association
Jim Grant	Citizen
Mark Helleen	Citizen
Frank and Mimi Hodsohl	Citizen
David Holly and Holly Miles	Venice Street Homeowner
Jim and Diane Honaker	Citizen
Michael Jeck	Citizen
Jim Jeffrey	Citizen
Brian Knode	Poplar Heights Civic Association
Karen Kowalczyk	Citizen
Claudia Kuhlman	Poplar Heights Civic Association
John and Sharon Kulesz	Venice Street Homeowner
Beth Lachman	Citizen
Keith Lenert	Citizen
Charles Leslie	Citizen
Steven Lester	Poplar Heights Civic Association
Patrick Lucas	Citizen
Kelly Lukins	Citizen

Janice Martin	Poplar Heights Recreation Association
Denise McFadden	Citizen
Michael McGinn	Venice Street Homeowner
Liz McKeeby	Mason District, Office of Supervisor Penny Gross
Bob McNare	Citizen
James Mottley	Venice Street Homeowner
Greg Neubig	Citizen
Cecilia Op de Beke	Poplar Heights Recreation Association
Barbara Pace	Citizen
Don Parnas	Citizen
Ralph and Denise Pennino	Citizen
Dan Putziger	Citizen
Clem L. Rastatter	Versar
Steve Reiter	Citizen
Francoise Renard	Venice Street Homeowner
Richard Renfro	Citizen
Elizabeth Robichaud	Venice Street Homeowner
Aaron Rodehorst	Citizen
Russell Rosenberger	Citizen
Don Rosholt	Citizen
Assad Rouhi	Northern VA Soil and Conservation District
Ann and Glenn Rounsevell	Citizen
Bill Schotz	Citizen
Larry Sexton	Falls Hill Civic Association
Wyatt Shields	Assistant City Manager, Falls Church City
Jennifer Shore	Versar
Mark Sutherland	Versar
Robert Stalzer	Deputy County Administrator, Fairfax County
Erin Stevens	Citizen
Steve Swenson	Citizen
Ken and Kathy Taylor	Citizen
Doris and Pat Tiller	Poplar Heights Civic Association
Margaret Tulloch	Supervisor Smyth's office
Moe Wadda	Falls Church City
Chuck and Eileen Watson	Citizen
Rick and Arlene Wilder	Citizen
Cynthia and Eric Wilson	Citizen
Gail Wright	Citizen
Dave Yenson	Citizen
Marie Yochim	Citizen
Ken Propp	Citizen

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## APPENDIX B: INTERVIEW QUESTIONS

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Name \_\_\_\_\_ Affiliation \_\_\_\_\_

Phone/Date/Other info \_\_\_\_\_

**Introduction:** I work for RESOLVE a neutral, private, non-profit group that assists people in addressing complex environmental and public policy issues.

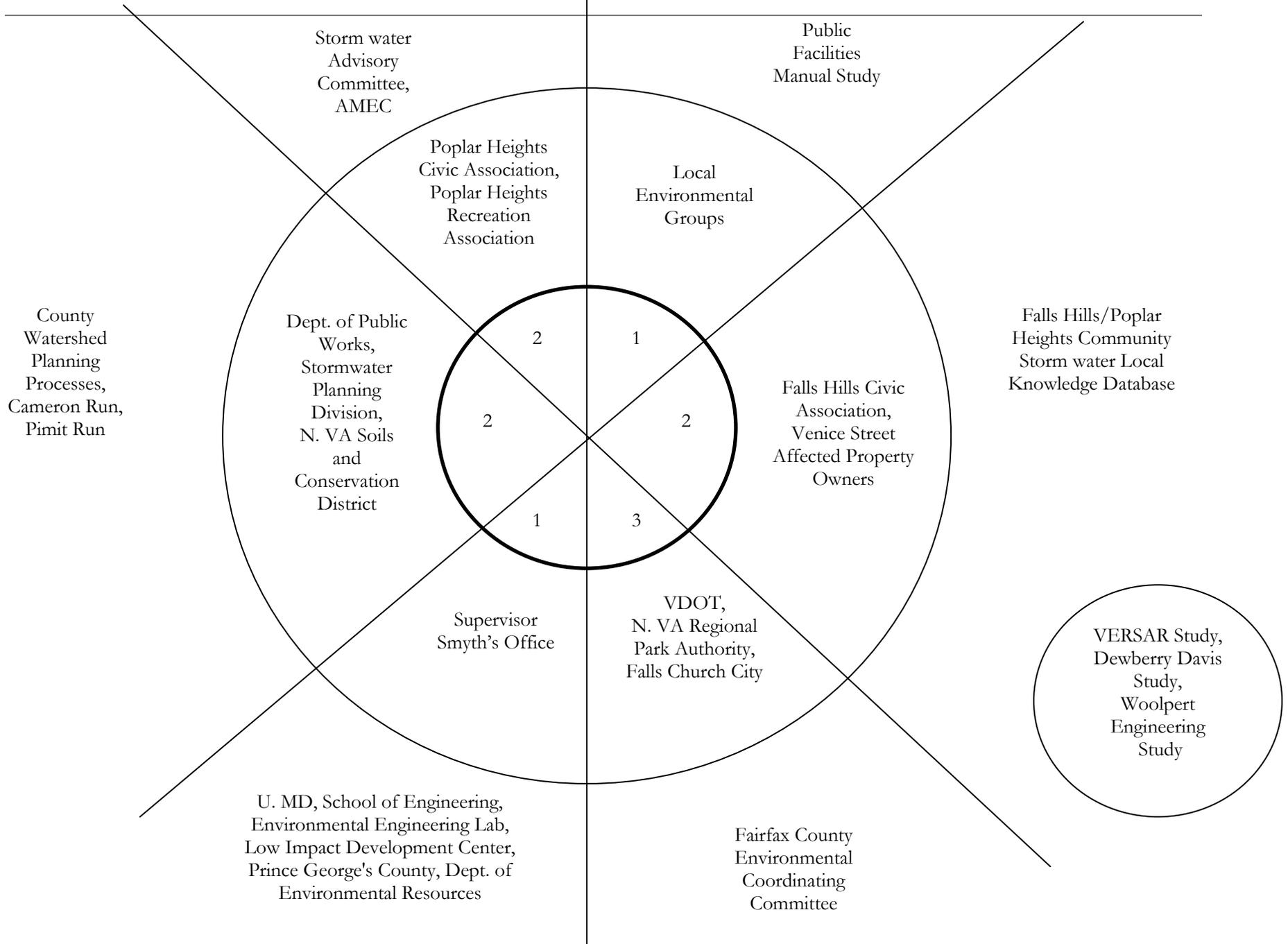
**Goal/Purpose:** I have been hired to interview a number of people that represent the range of perspectives on issues and concerns related to the storm water issues in Falls Hills and Poplar Heights and to discuss the opportunity for initiating a collaborative process. This interview process is confidential and I will not attribute comments made by individuals. At the conclusion of the interview process, I will prepare a summary report of the discussions as well as provide recommendations on whether and how to move forward with some form of a collaborative and/or public involvement process.

### QUESTIONS:

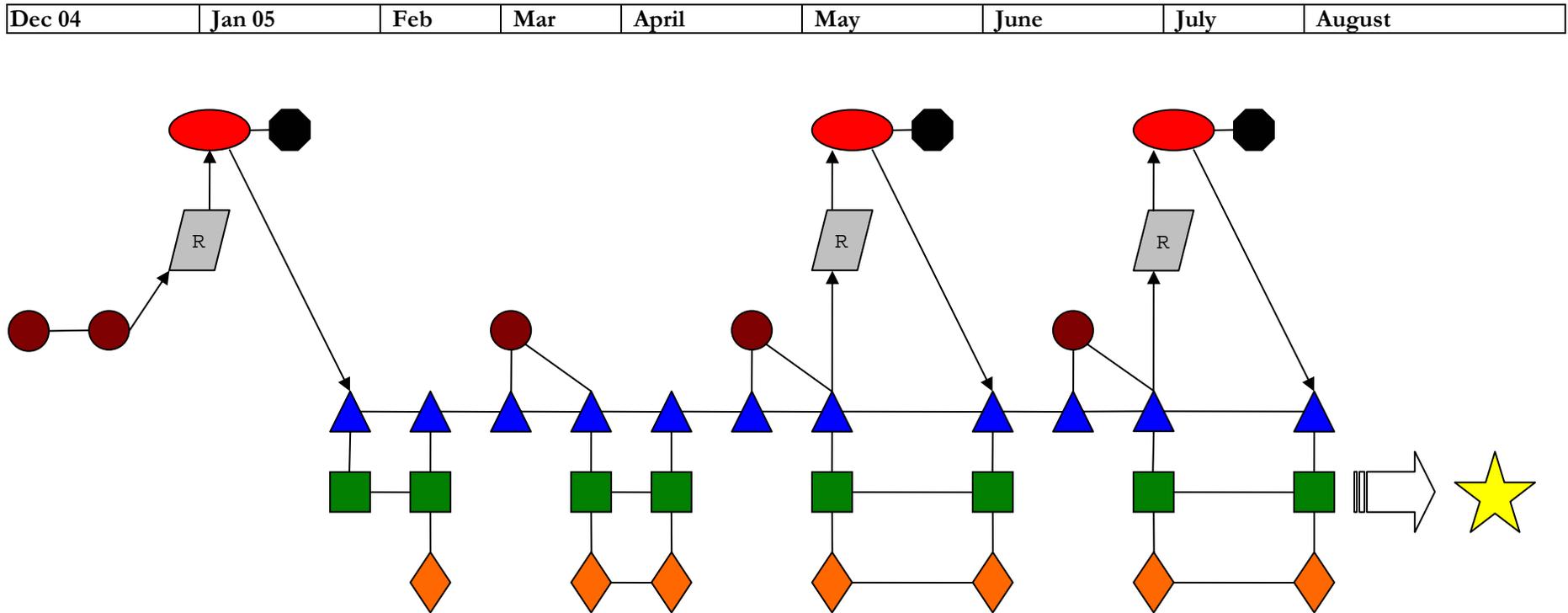
- 1) Please tell me a bit about yourself? How long have you lived in the area?
- 2) Can you tell me a little bit of your history and involvement with the Storm water problem?
- 3) What worries or concerns you most about the Storm water problem?
- 4) Is the flooding problem improving or declining compared to the past, or staying the same?
- 5) If a consensus-building process were developed for the storm water problem, what are the issues that you think should be discussed in such a process?
- 6) How are these issues important to you?
- 7) If there were a consensus building process, what would you consider a “successful outcome” of such a process?
- 8) Who do you think is important to include in such discussions?
- 9) Given the opportunity, would you (or your organization) be interested in being part of the core negotiations?
- 10) Would you be the appropriate person to represent your interests (or organization) in this situation or someone else?
- 11) What would need to happen during the project to make this effort worthwhile to your group?

- 12) If you (or your group) were not able to participate, is there any other group that you believe could represent your interests about this project?
- 13) If you were representing your organization in negotiations, how would you keep the rest of your organization and its broader constituency updated on the discussions?
- 14) If a collaborative process were undertaken, what do you think negotiation dynamics would be like? Can you think of anything that would help make it constructive?
- 15) What ground rules do you think are particularly important to establish for a group to work together productively?
- 16) If a group met for several months with work done in between meetings by subcommittees or working groups--what would the best days of the week, times of the day and places be to meet?
- 17) What information do you need to participate well? What information can you bring to the process? How do you want to learn and share information?
- 18) What would the impact be if discussions or negotiation did not result in agreement?
- 19) Are you aware of any barriers to a successful process? (What?) Do you see ways in which they could be overcome? (How? Needs for support to participate effectively?)
- 20) Are there other people or organizations that I should contact who could provide additional information? If yes, can you provide contact information?

**APPENDIX C: STAKEHOLDER DIAGRAM**



**APPENDIX D: PROCESS DIAGRAM FOR STORM WATER COLLABORATIVE PROCESS**



**Goals Through Time**

Information Gathering & Develop Convening Report	Go/No-Go Decision from County	Form Collaborative Group	Define Problem	Learn About & Identify Solution Options	Develop & Submit Options Report	Examine Options Package & Get Public Feedback	Develop & Submit Final Recommendations	Agree on Implementation	Community Celebration!
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**Key**

- Public Meeting
- Report
- County Meeting
- Decision
- Steering Committee
- Collaborative Group
- Technical Advisory Group