

Gulf Branch Stream Restoration Meeting & Feedback Summary July 17, 2019 Open House and Summer 2019 Online Form

Thirty-seven people attended the July 17, 2019 open house-style event. Staff provided information on:

- The goals of the project, important considerations, process
- Stream erosion and impacts, both local and downstream
- Understanding stream restoration elements and components, and other stormwater management tools like rain gardens
- The potential design scope, including several key areas of concern
- Key considerations for design and construction
- Trees and streamside forest health

This was a pre-design meeting to collect feedback from the community. Staff were available at each station to address concerns, answer questions, and to hear input. Attendees also were able to write questions and comments, which are included here with answers. For the open house poster PDFs, please see the project webpage (<https://projects.arlingtonva.us/projects/gulf-branch-stream-restoration/>).

There was also an online feedback form open from mid-June through September 2019, with 176 respondents, which covered the effects of stream erosion and stream restoration tools, as well as broad questions about how the Gulf Branch stream is used and valued, and what changes the community hopes to see.

Key themes and questions from the open house and online feedback form included:

Trails: The trails along Gulf Branch are very important to the community. Many people requested maintaining and/or improving existing trails in the stream restoration area and allowing for some sort of walking trail access during the stream restoration installation.

- *We will take this concern into account to the extent that it is safely possible by providing detours and/or phasing work, and planning for the continuation of trail use in the project design.*

Climate change and July 8 storm: There were many concerns about the effects of the July 8 storm, including eroded banks and fallen trees. Exposed and vulnerable infrastructure (pipes, manholes, access road) and damaged bridges were all noted as concerns.

- *The damage from the July 8 storm showed the need for stream restoration. The Gulf Branch stream is the highest priority for restoration due to the steep banks, exposed and vulnerable infrastructure, and damaged outfalls, all of which were further damaged in the July 8 storm.*

Erosion and access to the stream: The pace of erosion and steep stream banks was a concern for many respondents. Several people wished to be able to walk down to the stream with children.

- *The stream restoration will directly address the stream erosion and active erosion. More gently sloping banks are a key feature of a restored stream.*

Trees and forest health: Many people noted the importance of the shade, and the trees, both from a human and ecological perspective.

- *Unfortunately, stream work is disruptive, and some trees will have to come down as part of the project. However, even if we do nothing, trees would be impacted and come down due to ongoing stream erosion. We will replant at least 1:1 per Arlington requirements to ensure that the tree canopy closes again over the stream area. [See the project posters for a more in-depth discussion of tree considerations.](#)*

Native/invasive plants: Several respondents were concerned that disturbing the soil along the stream restoration would open the area to non-native invasive plants.

- *Native plants will be exclusively used for replanting. Plant rescues can be conducted in coordination with volunteer groups. Invasive removal will be funded through the stormwater program for the first five years, after which it will fall under Parks' jurisdiction. Currently Parks conducts annual invasive plant treatment along the Gulf Branch stream corridor.*

Habitat/wildlife: Some participants were curious about the effect of the restoration on insect and animal wildlife and water quality.

- *Stream bugs in restored Arlington streams are the most sensitive found in the County. They are the same kinds as those found in Arlington's unrestored stream sections with adequate habitat. Arlington's restored streams have good dissolved oxygen levels, riffles, habitat, and surrounding vegetation.*

Stream restoration concerns, upstream runoff: There were a few concerns questioning the use of stream restoration as a tool and wishing that Arlington County would not move forward with this project or any stream restoration in general. There were also related concerns that the true problem is the new development (as opposed to existing development) and that more trees or rain gardens (also known as bioretention or green streets) would be a better way to address the problems in the stream.

- *Existing roads, roofs, driveways, sidewalks and parking lots cover ~30% of Gulf Branch watershed. Over the last 10 years, the imperviousness in Gulf Branch watershed increased from 28.9% to 30.3%. This increase is not enough to change the character of the stream – it was already impacted by previous development.*
- *While rain gardens and trees are important to manage runoff in the surrounding watershed, and are actively being pursued by the County, they are not enough. And even if they were, the stream would still be severely eroded and have exposed sanitary sewer pipes, and we would still need to fix those problems. [Learn more about stream restoration myths and misconceptions discussed during the October 2019 meeting of the Gulf Branch advisory group.](#)*

Education: A few people requested ongoing education prior to and during construction for the community.

- *We will continue to reach out through a variety of venues, which could include temporary educational signage prior to and during construction.*

Natural feel, love for park and stream: The Gulf Branch community cherishes this park as an escape from the urban footprint of Arlington and wishes to continue to have a natural surrounding for this area long into the future.

- *This park is a special place for many people. Although there will be a short-term impact, it is our hope that the community will appreciate the longer-term stream stability and benefits, together with a continued natural feel for the stream.*

The full list of station-by-station feedback from the July 17, 2019 meeting is provided below. The results from the summer 2019 online feedback form can be found at the end of the document. We have reviewed each of the comments and will incorporate them as possible into the plans as we enter the next design phases.

Station 1: What impacts of stream erosion are you most concerned about in Gulf Branch?

- Did the storm identify new issues or opportunities associated with the restoration? Anything unexpected?
- What will be the effects on the insect and animal life in and around the stream?
- Stream channel widening, taking trees and paths and adding too much sediment to the stream and river
- The widening banks
- Losing mature trees and washing out paths close to the stream
- Trees falling on paths & algae blooms
- Wiping out walking paths and taking out trees next to stream
- I understand some deep infrastructure improvements will be needed to address underlying problems. Focus on replanting after.
- Has the County Board taken into consideration the consequences of their decision to allow the decrease of the setback & increase in the impervious surfaces?
- I worry about erosion above Gulf Branch, can't we address that, too?
- Invasive plants are encouraged by removing trees. See Rod Simmons, Alexandria Nature Manager
- The picture of the confluence of Donaldson Run A and B is not a normal day
- Sewer lines should not be located in streambeds
- Most of the damage is due to poor maintenance for 50 years.
- Restored areas of Donaldson Run show the same erosion of roots.
- The fact that you guys are considering it! Fix the existing infrastructure and leave the natural alone!

Station 2: Which stream restoration or stormwater management techniques have you seen in Arlington?

- The pictures of Donaldson Run are not true representation of the condition.
- Maintain the existing stream and harden it. Disturb the minimum amount of land.
- All the pictures of techniques look like vast improvements for Gulf Branch.
- At Discovery School – excess water is coming into neighborhood
- Pervious pavers, native rain garden, barrels for rain
- Step pools, rain gardens
- All of them. They're destructive.

What did you like about them?

- Rain garden on Old Dominion Drive looks great
- Rain gardens of Patrick Henry – storm drain redesign & rain garden at 9th & Patrick Henry have held up great over the years!

- New rain gardens are beautiful but unclear how much water makes it into them.
- Native species, wetlands look healthier.
- They increase stream capacity while looking natural (ish).

What did you think could be improved?

- Donaldson Run was restored but has tons of flooding?
- The County should do a feasibility study to determine whether putting grills over storm sewer inlets will prevent garbage from being flushed into the stream system without causing other worse problems.
- Doing nothing is not an option based on current conditions.
- Careful evaluation of land use.
- This stream channel is ravaged by current and recent conditions, making the stream ecosystem unhealthy and unstable. It would be ignorant to leave it as is when natural channel design can regain so much.
- Not doing them!

Station 3: Of sites 1-4, which area(s) are you most concerned about (up to 2)? What are your site-specific concerns?

- Several people said they had already answered this question in the online feedback form
- Site 1: 2 votes
- Site 2a: 1 vote
 - “Top priority – address sewage/sanitary pipe problem”
- Site 2b: 3 votes
- Site 3: 3 votes
 - Hike the trails, site & soak in nature. Concerns: washout of trails, losing trees as streambank erodes.
- Site 4: 3 votes
 - Place native trees around edges
 - Site 4 is a rare Dryopteris species ravine
- Identify source points of heavy stormwater runoff and construct velocity reduction/settling dams in series along their path.
- Please look at western edge of stream beginning somewhere east of 37th St to Dittmar. County put “decorative” stream on top of buried stream. It has been diverted by neighbors on 38th St into sewers thus causing mud and water holes downstream and mosquitoes!
- Dittmar: buried creek at 38th & Chesterbrook Rd. Mosquito (?) breeding water, pedestrian bridge.

Station 4: Key considerations for design and construction. Which of these are most important to you (up to 2)?

- Protecting natural resource conservation areas (locally rare/ecologically significant habitat): 10 votes
- Aquatic habitat for fish and stream life: 6 votes
- Streamside forest health: 12 votes

- Stream stability in extreme weather events and increased development in watershed: 10 votes
- Access to parts of stream and park during construction: 4 votes
- Infrastructure protection (wastewater pipes, driveway access, etc.): 2 votes

Other considerations for design and construction?

- Involve scout programs?
- Protecting mature trees
- Do no (or very little) harm
- The stream should not lose its flow. Its mini waterfalls and deeper pools are delightful. Can banks be stabilized to minimize future tree loss?
- We use the nature area every weekend and will be greatly impacted by construction closures.
- Studies overwhelmingly show stream projects for small order interior forested streams destroy not create habitat for stream life.

Station 5: Share your thoughts about trees and streamside forest health:

- I am supportive of long term investment but would like to keep as many healthy and mature trees and canopy as possible
- County strictly enforces RPA issues regarding homeowners and improvements. But my observation when county works/renovates park areas those same best practices are disregarded. Very hypocritical.
- Make it easy for residents to work on park/stream restoration on a volunteer basis. Sign a liability waiver and permit us to do cleanup and minor erosion control projects. Like we do on our properties.
- I would like to make sure that forestry and vegetation are preserved to the maximum extent possible.
- Preserve as many trees as possible – can banks be stabilized or regularly maintained to avoid future drastic projects?
- As the i-Tree calculation shows, every mature tree provides many benefits. Please preserve as many as possible.
- Keep the corridor forested to the extent possible, removing trees only as needed to reconfigure a new stable natural channel.
- These inappropriate and unnecessary projects kill them.

Is there anything you would like to change or improve about Gulf Branch stream and surrounding area?

- Restore stairway to the river at the end of trail
- Preserve and restore the overall watershed and ecology of the Gulf Branch riparian area. Trees may need to be sacrificed.
- Enforce leash laws!! Too many dogs off leash!
- Try to minimize the mad rush of water that occurs with our ever more frequent and more severe thunderstorms
- Garbage control (garbage entering storm sewer systems)
- Deer control.

- No dogs off leash. New bridge!
- Minor tweaks but please preserve most of this unique environment!
- Natural channel design in the stream channel is the goal, to the extent possible. Do not over-armor the channel, but increase dynamic stability to handle the reality of flashy runoff and its impacts.
- Total washout of steps and grade at Utah Street meadow entrance. Could have been prevented if County had properly swaled it a few years back when they moved a lot of gravel back there.
- Work to keep sheetflow runoff from impervious surface out of stream!

What do you value about the Gulf Branch stream valley? Why?

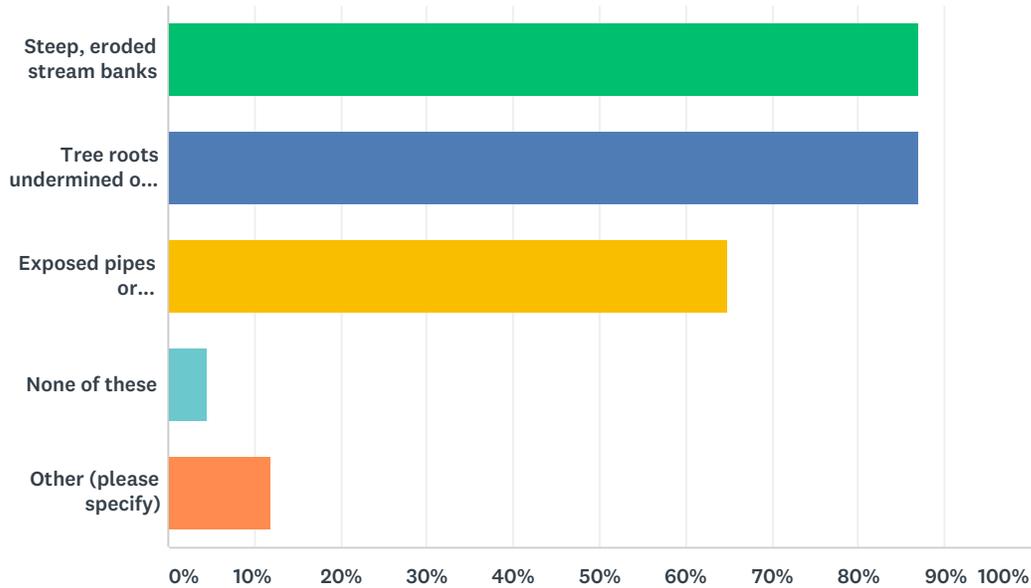
- This is a beautiful natural Arlington getaway. The stream's water has usually been clear. Many birds are seen along the river. It's like a vacation break right near home.
- The shade
- I love being able to walk the trails and play in the creek with my children. We spend hours in all 3 nearby creeks.
- It's like being in wild, wonderful West Virginia! Without the drive!
- Eels.
- Access to nature and trails for walking with dogs so close to home.
- (Real) natural habitat for wild animals, birds, insects, etc.
- Forested stream corridors with public access are priceless in a heavily urbanized area. This area should remain a forested park, but the impacts of upstream impervious surface on the stream corridor need to be remedied in this project.
- Memories of long walks with my children – and by myself if they happened to be in a program at the nature center!
- The nicest & “wildest” remaining stream valley in Arlington. All the more reason to leave it alone!

July 8 Storm Impacts on Gulf Branch Stream Corridor and Watershed

- When will the pedestrian bridge be rebuilt?
- Look at entire stream from 37th St to Dittmar. No water most of the year leading to mosquitoes.
- Impact: from stormwater drain failure to the nature area was frustrating. Very disheartening to be doing so much as residents to contribute to Chesapeake wellness and then the county run & owned facility to cause catastrophic damage.
- Deal with sheetflow runoff entering Gulf Branch, not trash the stream valley!

Q1 In response to increased runoff from roads, roofs, and parking lots, stream banks erode and get steeper and wider (see photos below). Which of the following effects of runoff have you seen in Arlington streams (select all that apply)?

Answered: 176 Skipped: 0



ANSWER CHOICES	RESPONSES
Steep, eroded stream banks	86.93% 153
Tree roots undermined or trees falling in streams	86.93% 153
Exposed pipes or infrastructure	64.77% 114
None of these	4.55% 8
Other (please specify)	11.93% 21
Total Respondents: 176	

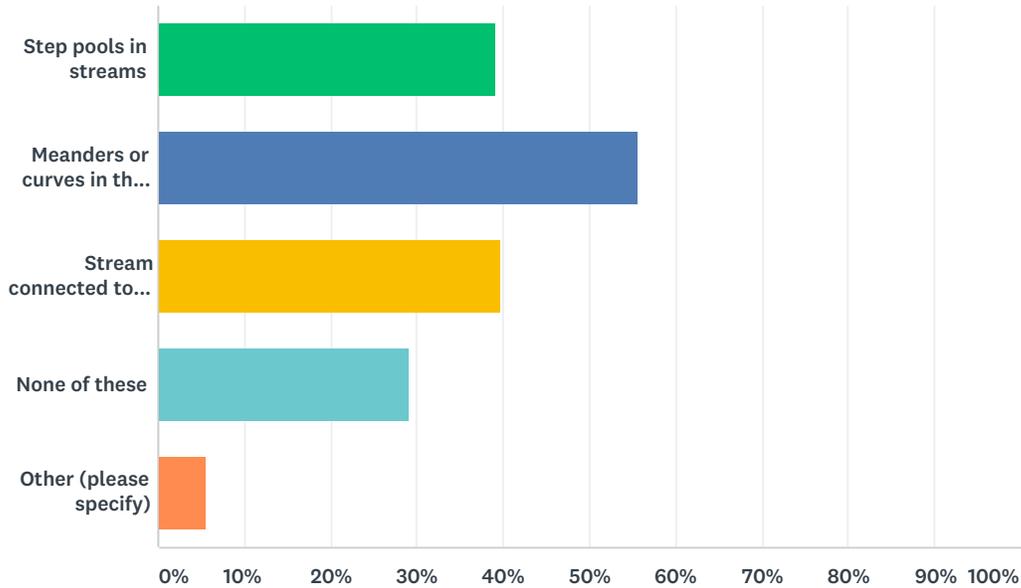
#	OTHER (PLEASE SPECIFY)	DATE
1	There is a fallen bridge in four mile run, just north of Colombia pike.	8/13/2019 3:04 AM
2	Eroded trails; bridges washed away	8/9/2019 2:08 PM
3	Destruction of bridges in Four Mile Run, low stream flow during dry periods	8/9/2019 7:24 AM
4	Washing out of trails.	8/7/2019 12:41 PM
5	Erosion impacting trails	8/7/2019 10:51 AM
6	B	8/6/2019 2:59 PM
7	Bacterial mats at storm sewer outflow sites.	8/6/2019 8:36 AM
8	erosion of hiking trails	8/2/2019 11:47 AM
9	Oil and lots ignored trash	7/27/2019 9:27 AM
10	muddy areas in trails	7/21/2019 11:26 AM

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11	Possible runoff from home construction or lawn services abutting the streams (paint, chemicals and other items that cause discoloration/pollution (probably not applicable to this project)	7/18/2019 12:13 PM
12	Trash from storm events	7/14/2019 7:45 PM
13	Foot paths reduced to mud, or wiped out or both.	7/9/2019 1:08 PM
14	Flooding on Donaldson Run pool Every August	6/27/2019 1:23 PM
15	Rust colored water entering stream from drain pipes - possible chemical contaminants	6/26/2019 3:47 PM
16	Lose of private property	6/26/2019 10:50 AM
17	Polluted, colored and smelly water	6/23/2019 5:23 PM
18	Arlington's uncontrolled development and proliferation of impervious surfaces guarantee that our streams will be degraded in this manner. Arlington's streams could easily "restore" themselves if Arlington County Government ever decided to enact sensible regulation and land-use policies that reduce the amount of runoff (volume as well as speed) being dumped into our streams. Until such time as Arlington takes a more responsible approach to land use and development, there will be no restoration of its streams — and staff's unwise use of heavy equipment and the removal of mature trees and existing vegetation simply makes the streams hotter and less viable for life with a much higher proliferation of invasives. Not a positive result in my book.	6/21/2019 12:21 PM
19	This question represents how inept these surveys are. You can walk down the stream and see these things and it doesn't mean anything to the project. Again Arlington staff miss an opportunity.	6/21/2019 9:38 AM
20	I live on the creek. I do my best to keep trash OUT of the creek. In past years, I have noticed and reported pollutants (anti freeze, paint) flowing through our creek. We used to have live eels, and other small fish. That is no longer the case. The health begins ' upstream' . Those of us who ' adopted' our creek and park years still work to keep the stream clear of debris.	6/21/2019 6:18 AM
21	poor maintenance of outfalls and previous stream erosion prevention measures as well as increased street gutters increasing flows	6/19/2019 7:24 AM

Q2 Stream restoration creates a new, stable stream using techniques like step pools, meanders (natural curves), and reconnecting the stream to the floodplain (see photos below). Which of the following have you seen in Arlington (select all that apply)?

Answered: 176 Skipped: 0



ANSWER CHOICES	RESPONSES
Step pools in streams	39.20% 69
Meanders or curves in the stream path	55.68% 98
Stream connected to floodplain (not steep banks)	39.77% 70
None of these	28.98% 51
Other (please specify)	5.68% 10
Total Respondents: 176	

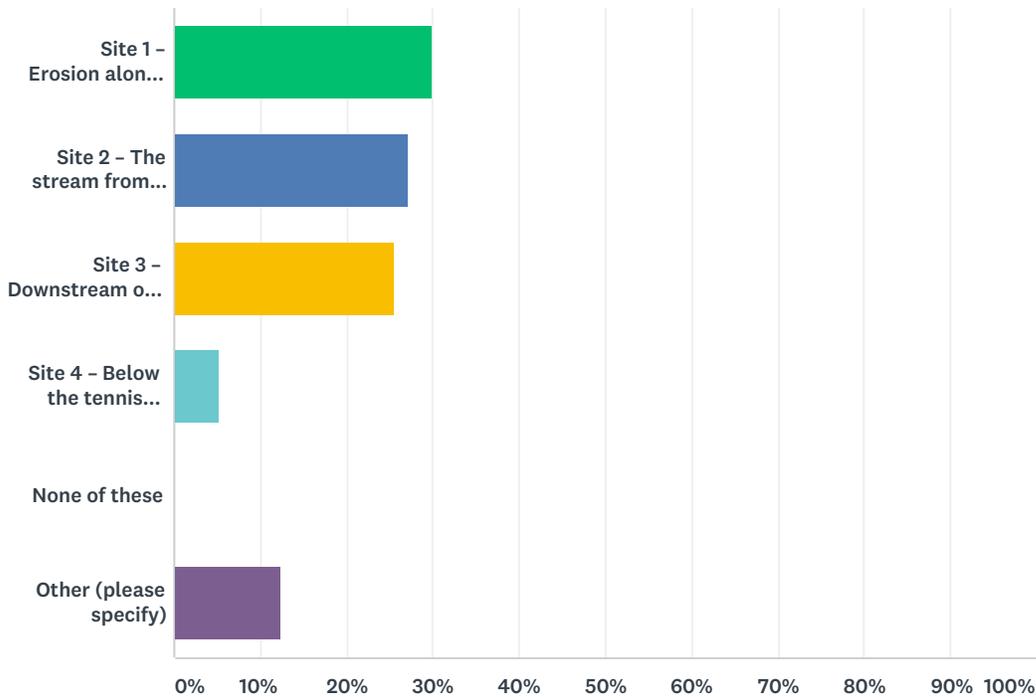
#	OTHER (PLEASE SPECIFY)	DATE
1	Haven't seen any around Gulf Branch	8/7/2019 3:11 PM
2	Stream buffer areas of natural vegetation	7/21/2019 4:02 PM
3	Efforts at 4-mile run	7/14/2019 7:45 PM
4	Native plant restoration along the river banks	7/12/2019 11:38 AM
5	Large stones to prevent erosion (Hitchcock Branch near Gulf Branch)	7/9/2019 1:08 PM
6	Donaldson Run	7/7/2019 3:28 AM
7	Water Flow routing	6/29/2019 8:55 AM

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8	All of these mechanisms have failed because they focused solely on the function of the stream to carry water and not on the ecological well-being of the entire system. See Bernhardt and Palmer (2011) https://www.researchgate.net/publication/51662579_River_Restoration_The_Fuzzy_Logic_of_Repairing_Reaches_to_Reverse_Catchment_Scale_Degradation . "Despite a lack of measurable ecological improvement (sensu Palmer et al. 2005), most restoration practitioners consider their projects to be successful (Bernhardt et al. 2007, Jähnig et al. 2011)." So-called step pools are deadly and counter-productive. See "Bay scientists say stream restoration not delivering as much as hoped" at https://marylandreporter.com/2018/11/28/bay-scientists-say-stream-restoration-notdelivering-as-much-as-hoped/ . "One of the main methods that contractors use to slow floodwater is creating a chain of pools separated by rock weirs; they're embedded in a slope so that one trickles into the next. In warm weather, decaying plants trapped in the slow-moving water can use up its oxygen. When water turns anoxic, or lacking in oxygen, it can flip that lingering phosphorus from a positive story to a negative one. A chemical reaction unglues the nutrient from the sediment, transforming it into a fertilizer for algae blooms, Filoso said...."	6/21/2019 12:21 PM
9	Same as above	6/21/2019 9:38 AM
10	poor maintenance of outfalls and previous stream erosion prevention measures as well as increased street gutters increasing flows	6/19/2019 7:24 AM

Q3 In Gulf Branch, the following problem areas have been identified. Which area is most important to you?

Answered: 114 Skipped: 62



ANSWER CHOICES	RESPONSES
Site 1 – Erosion along stream near nature center. The stream banks have eroded, undermining tree roots and threatening to undermine the nature center access road.	29.82% 34
Site 2 – The stream from Broyhill Forest Park flows into Gulf Branch here (upstream of the nature center). The banks have eroded behind the old stream walls, exposing sanitary sewer pipes and carrying sediment downstream (2a). The pipe outfall from Broyhill Forest Park is also damaged and there is erosion down the slope by the stairs (2b).	27.19% 31
Site 3 – Downstream of Military Road. There is significant streambank erosion, especially where stormwater pipes empty into the stream. (There is also an Arlington County Natural Resource Conservation Area with locally rare native plants and habitat beginning after N Peary St and continuing downstream.)	25.44% 29
Site 4 – Below the tennis courts, there is a swingset, a trail, and open grassed area by the Covenant HOA. The stream channel is actively eroding.	5.26% 6
None of these	0.00% 0
Other (please specify)	12.28% 14
TOTAL	114

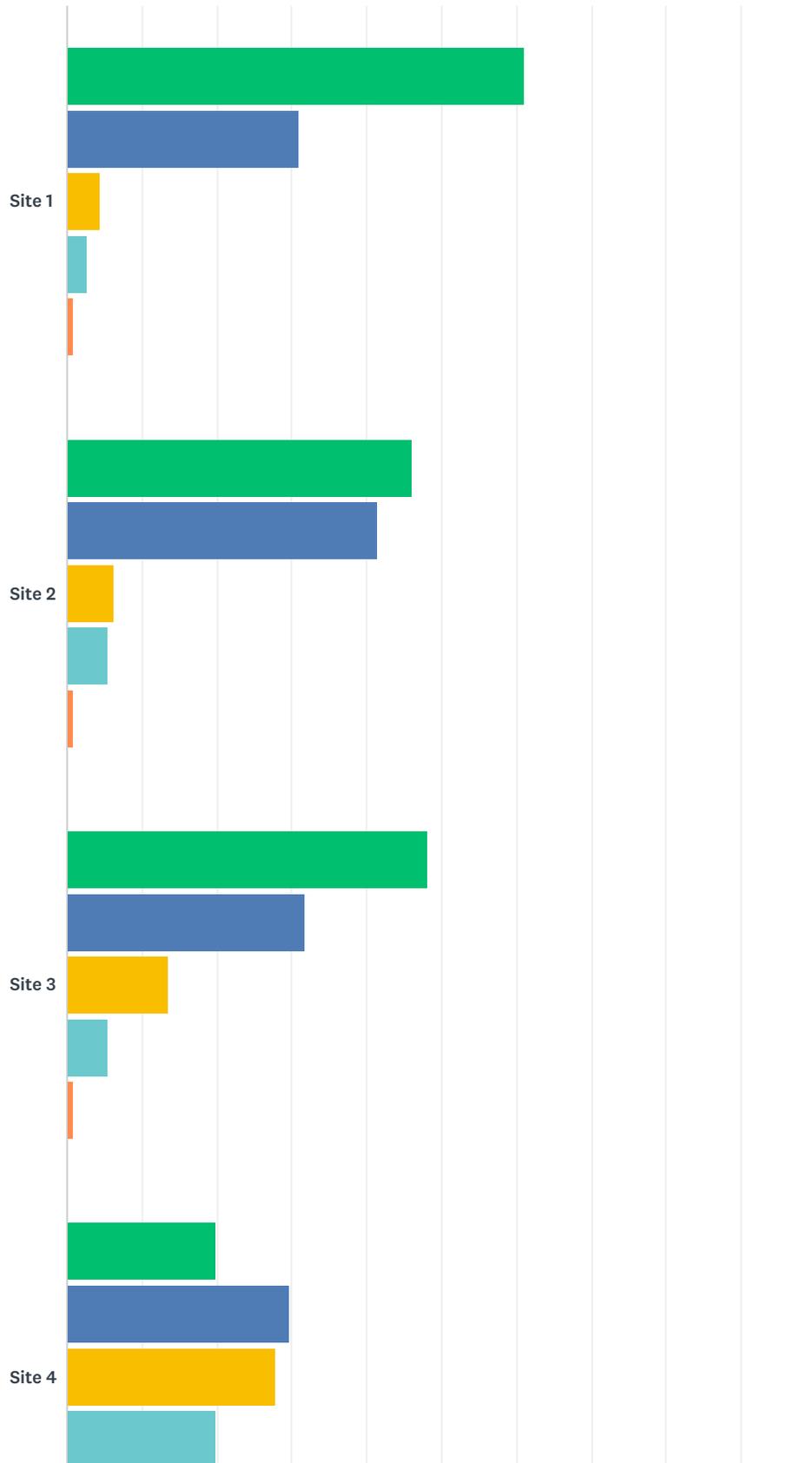
#	OTHER (PLEASE SPECIFY)	DATE
1	Closer to river.	8/9/2019 8:23 AM
2	All of above. I walk and visit all these wonderful areas.	8/7/2019 3:19 PM
3	Hard to pick just one! Would say #3 too. Or all!	8/7/2019 1:21 PM
4	Hard to describe which one is most important. I do not live near the stream.	8/2/2019 4:42 PM
5	seems like all these areas should be addressed	7/25/2019 5:25 AM

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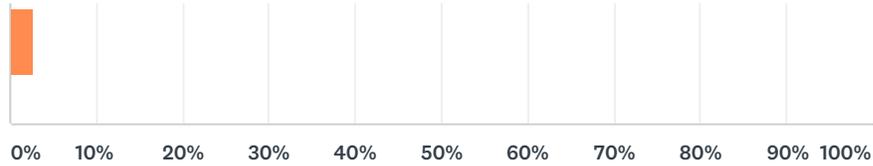
6	i don't know this park	7/18/2019 9:28 AM
7	Repair isolated areas like Sites 1 & 2; leave the rest alone, thus avoiding the numerous problems (loss of mature trees, seedbanks, opening areas to invasive plants)	7/8/2019 10:47 AM
8	All of these sites are important to me.	7/7/2019 3:32 AM
9	Access to nature center should be priority number 1	6/26/2019 3:57 PM
10	All of these are important.	6/26/2019 1:35 PM
11	All of these areas have urgent problems. But the priority must be the reduction of stormwater runoff into Gulf Branch. Otherwise, any repairs will be just temporary measures, at best. "[S]ome scientists say controlling erosion is only one facet of restoring a waterway. They say its benefits don't last if nothing else is done to reduce runoff from development before it pours into the stream. 'You can't ask a stream to do everything an entire watershed should do,' said Margaret A. Palmer, a University of Maryland scientist who's researched restoration ecology. She's published studies finding 'no consistent evidence' that restored streams reduce nitrogen, another key pollutant fouling the bay." https://www.baltimoresun.com/maryland/baltimore-county/bs-md-stream-restoration-20141009-story.html	6/21/2019 1:26 PM
12	They are all important. Why would you rank?????	6/21/2019 9:41 AM
13	In order of concern: Site 1 Site 2 , Site 3.	6/21/2019 6:30 AM
14	Each of these can be addressed with less costly and damaging mehtods to preserve the natural environment	6/19/2019 7:41 AM

Q4 Please rate how important these areas are to you.

Answered: 114 Skipped: 62



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■ Very important
 ■ Important
 ■ Somewhat important
■ Not very important
 ■ Not at all important

	VERY IMPORTANT	IMPORTANT	SOMEWHAT IMPORTANT	NOT VERY IMPORTANT	NOT AT ALL IMPORTANT	TOTAL	WEIGHTED AVERAGE
Site 1	61.06% 69	30.97% 35	4.42% 5	2.65% 3	0.88% 1	113	1.51
Site 2	45.95% 51	41.44% 46	6.31% 7	5.41% 6	0.90% 1	111	1.74
Site 3	48.18% 53	31.82% 35	13.64% 15	5.45% 6	0.91% 1	110	1.79
Site 4	19.82% 22	29.73% 33	27.93% 31	19.82% 22	2.70% 3	111	2.56

#	PLEASE PROVIDE ANY COMMENTS (OPTIONAL).	DATE
1	I feel like y'all are the experts, so if there is one area that's more important or in more need, start where it makes sense.	8/8/2019 5:35 AM
2	I walk all of these areas several times a week.	8/7/2019 3:19 PM
3	my son measured the outfall as a science project...this is a critical contamination	8/6/2019 8:24 AM
4	can green infrastructure be installed upstream to reduce scouring, pollution?	7/25/2019 5:25 AM
5	I am growing concerned that the trail will fall into the stream as someone uses it.	7/18/2019 12:13 PM
6	i don't know this area	7/18/2019 9:28 AM
7	Because of the public health potential damage of a sewage problem, I gave site to a higher priority.	7/12/2019 11:50 AM
8	Site 1 critical to community access to Gulf Branch	6/26/2019 3:57 PM
9	I am not familiar with all these sites.	6/22/2019 1:13 PM
10	Again, these results are avoidable. Staff should address the underlying problems first — increasing impervious surfaces and increasing stormwater runoff volume — before trying to correct the damage resulting from weak regulation and poor land-use decisions.	6/21/2019 1:26 PM
11	All are important. Question is what people are willing to do to slow down the water.	6/21/2019 9:41 AM
12	Site 4.. build a foot path bridge over the stream here. Maintain the natural meadow feel	6/21/2019 6:30 AM
13	All are important but listing them in order does not address the central question of whether stream restoration is effective in the long run or cost effective for taxpayers. The runoff will continue to increase making restoration ineffective. Donaldson Run has been deteriorating over the last decade due to poor design and increased flows. Upland techniques to hold the water where it falls is what is needed.	6/19/2019 7:41 AM

Q5 Is there anything you would like to change or improve about the Gulf Branch stream and surrounding area?

Answered: 114 Skipped: 62

#	RESPONSES	DATE
1	It's wonderful as it is!	8/24/2019 5:42 PM
2	More bridges	8/13/2019 3:12 AM
3	Increased and more dynamic signage directing residents and passerby towards the stream	8/12/2019 1:00 PM
4	Storm drainage	8/12/2019 4:33 AM
5	The planned stream restoration	8/11/2019 6:05 AM
6	?	8/10/2019 6:07 AM
7	NA	8/10/2019 12:03 AM
8	improve stream quality (e.g., prevent trash, glass, etc. from entering stream)	8/9/2019 2:09 PM
9	Add more trees to prevent future erosion concerns	8/9/2019 11:16 AM
10	Improve access to the trails.	8/9/2019 8:57 AM
11	.	8/9/2019 8:23 AM
12	Wash out make it difficult to cross the stream.	8/9/2019 8:16 AM
13	Provide additional bridges to reduce the degree of erosion due to foot traffic in damp areas of the foot path	8/9/2019 8:14 AM
14	n/a	8/9/2019 7:27 AM
15	Anything you can do to help it be sustainable into the future, and help us mitigate effects of climate change.	8/8/2019 5:35 AM
16	More natural look to stream and less concrete	8/7/2019 11:32 PM
17	.	8/7/2019 11:26 PM
18	The trails. As erosion and run-off takes its tolls, many of the trails are becoming treacherous to walk (especially the area between Military Rd and the Potomac as it climbs, then descends to the most treacherous steps to cross stream!	8/7/2019 3:19 PM
19	No	8/7/2019 1:32 PM
20	What you're proposing - address erosion.	8/7/2019 1:21 PM
21	Safety and accessibility of trails.	8/7/2019 12:57 PM
22	No	8/7/2019 10:53 AM
23	Reduce the runoff and stricter enforcement of runoff on properties upstream	8/7/2019 9:34 AM
24	no	8/7/2019 7:42 AM
25	Get the concrete blocks out of eye sight that are along the stream	8/7/2019 5:32 AM
26	keep in a sustainable natural state as much as possible.	8/7/2019 5:24 AM
27	.	8/7/2019 5:02 AM
28	no	8/7/2019 4:17 AM
29	Keep it natural - little to no built environment	8/7/2019 3:34 AM
30	No	8/7/2019 3:23 AM
31	Remove exposed and damaged concrete	8/6/2019 8:37 PM

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32	No.	8/6/2019 5:33 PM
33	Improve the security of the park trails for future use. These are the conduits for the most important connections that Arlington residents have in this area.	8/6/2019 5:06 PM
34	Not at this time	8/6/2019 4:59 PM
35	Improve walking access to the area from surrounding neighborhood	8/6/2019 4:35 PM
36	No	8/6/2019 3:00 PM
37	Continue to get rid of invasive and move to native Va Plants	8/6/2019 2:50 PM
38	Make improvements to the Potomac heritage trail.	8/6/2019 1:56 PM
39	If there is anything that can be done about the actual water that's flowing from the storm sewer, that area consistently has bacterial mats and not much invertebrate life. As for the surrounding area, some more well defined trails would go a long way to keeping people off the woodland and let some smaller plants grow.	8/6/2019 9:09 AM
40	limit runoff to the stream, reduce invasives and poison ivy	8/6/2019 8:24 AM
41	I am doubtful that the proposed stream restoration efforts will reduce erosion or improve water quality -- given the steep slopes and banks and the proximity of mature trees it will be extraordinarily difficult, I think, to create pools or broader floodplains without marked changes to the overall aesthetics, habitat community, and tree canopy.	8/4/2019 4:47 AM
42	Walking trails could have enhanced barriers to keep people out of the forest.	8/2/2019 4:42 PM
43	Identify root causes and require future development that increases pressure on the watershed to pay for improvements.	8/2/2019 12:04 PM
44	Reduction of hardscape, create rain gardens and run-off reduction measures	8/1/2019 7:32 AM
45	More funding for fixes.	7/28/2019 9:25 AM
46	Erosion and the need for costly restoration will continue without reducing permeable surfaces and restoring tree canopy in the watershed.	7/28/2019 9:01 AM
47	Hiking trails too.	7/27/2019 8:20 PM
48	Strive to treat/capture/retrofit at least 25% of run off volume for current and future impermeable surfaces in the watershed	7/25/2019 5:25 AM
49	Make sure the paths are maintained to hike walk and run on	7/24/2019 1:38 AM
50	Build up trails to keep park users away from affecting the preserved areas	7/23/2019 3:31 PM
51	More natural vegetation	7/21/2019 4:07 PM
52	Perhaps there should be more periodic mulching (wood chips, etc) on all the trails to reduce muddiness and make the trails easier to walk.	7/21/2019 11:37 AM
53	Keep it green	7/21/2019 10:26 AM
54	Improve the stream, including the quality of the water in the stream.	7/21/2019 8:44 AM
55	Provide educational signage during and after restoration so the public understands why it looks the way it does	7/20/2019 1:46 PM
56	Reducing construction run-off/pollution of the water	7/20/2019 9:38 AM
57	No	7/20/2019 5:48 AM
58	No	7/19/2019 11:58 AM
59	1. Restrict the development (stricter FAR regulations) 2. Encourage stormwater mitigation for all new development (rain barrels, rain gardens, pervious hardscaping)	7/19/2019 9:56 AM
60	Reduction in invasive plant species lies.	7/18/2019 6:07 PM
61	Na	7/18/2019 5:09 PM
62	This is a fantastic walk to the river. Can the stairs the river be made more easy to use?	7/18/2019 3:38 PM
63	Plant trees to eventually replace those that have died during past 25 years to keep the wooded environment intact.	7/18/2019 1:00 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

64	Add in requirements from recent floods	7/18/2019 12:57 PM
65	N	7/18/2019 12:31 PM
66	There is often dis-colored standing water near site 3. Not sure of the source but it would be good to address that as well.	7/18/2019 12:13 PM
67	i don't know this area	7/18/2019 9:28 AM
68	I love the area and live on N. Utah across from the Broyhill Forest park. Stream crossings downstream from Military Rd would be great — right now there are 2-3 spots where the path crosses the stream and it requires carefully stepping across the rocks.	7/18/2019 8:28 AM
69	It is extremely important that we keep the stream! We are lucky enough to have the stream flow through our backyard on 38th St. We love it, and have worked to keep it beautiful and running in our little stretch.	7/17/2019 8:14 AM
70	Taller chimney and some cleaning filter for smoke from the blacksmith hut	7/17/2019 7:51 AM
71	No changes necessary. Just improve the existing situation to address erosion and all issues described.	7/17/2019 2:55 AM
72	Rebuild all foot bridges that were washed away	7/16/2019 2:46 PM
73	No - love the area!	7/16/2019 11:18 AM
74	More of it, introduction of more native animal species. Crawfish, salamanders turtles ect	7/16/2019 10:25 AM
75	The erosion is terrible.	7/16/2019 5:07 AM
76	Expand nature center and trails to allow for stream access	7/16/2019 5:03 AM
77	Seek budget for continuing maintenance.	7/14/2019 7:49 PM
78	My only consideration would be to return the streams to their natural conditions inasmuch as possible.	7/12/2019 11:50 AM
79	We live in the area along 37th St North (between Abingdon and 38th Street N) that drains into Gulf Branch. We and our neighbors have seen intense and numerous flooding events in the past couple years, as storm runoff overflows existing drains and then surges through our back yards. Anything that could be done to address the wider Gulf Branch area drainage area would be much appreciated by a good many residents.	7/10/2019 8:39 PM
80	Address erosion	7/10/2019 8:20 AM
81	Develop flood-proof walkways -- wood barriers but also permeable stone/pebbles, enclosed to prevent them running with the flow.	7/9/2019 1:12 PM
82	Prevent erosion of stream walls.	7/9/2019 12:28 PM
83	nothing other than already mentioned	7/8/2019 10:47 AM
84	Remove more of the invasive plants	7/8/2019 10:36 AM
85	More nature less playgrounds	7/7/2019 6:11 AM
86	The improvements mentioned above are sufficient. It would be terrific if we could reverse the damage and increase wildlife along the stream (fish, frogs, etc).	7/7/2019 3:32 AM
87	Benches for wildlife viewing	7/2/2019 6:38 AM
88	N/A	7/1/2019 5:37 AM
89	good trails / paths - safe, level	6/30/2019 6:06 AM
90	NA	6/29/2019 8:57 AM
91	There are some muddy areas near the nature center that could use some more wood chips.	6/27/2019 2:48 PM
92	Built up paths near the stream so one can hike along the creek and high bridges to cross where there is no room and need to cross stream that won't wash away in a storm	6/27/2019 1:51 PM
93	More trash cans along the way so people will have less of an excuse to litter.	6/27/2019 3:48 AM

Gulf Branch Stream Restoration Summer 2019 Feedback

94	The north fork of Gulf Branch (upstream from the Nature Center) is in relatively good shape thanks to the use of massive boulders to stabilize the banks. I don't know why the same technique couldn't be used on the south fork, and in the area near the Nature Center. Ditto with the steeper section northeast of Military Road (area 3).	6/26/2019 6:09 PM
95	Less blacksmith activity in log cabin. This is not environmentally friendly to the setting	6/26/2019 3:57 PM
96	Eliminate English Ivy	6/26/2019 1:55 PM
97	Erosion control	6/26/2019 1:35 PM
98	The part of Donaldson Run that was re-done is wonderful! Please do all of Gulf Branch like that!	6/26/2019 1:10 PM
99	n	6/25/2019 11:15 AM
100	Better trail crossings over the creek during high water levels to ensure safe crossing. Currently you find rocks to step on but that can be challenging.	6/23/2019 5:28 PM
101	Be careful with step pools. You can block the natural flow of water so much that plants invade the step pools choking it of oxygen.	6/22/2019 1:13 PM
102	Continue invasive removal initiatives	6/21/2019 2:43 PM
103	STOP PAVING OVER EVERYTHING AND ALLOWING DEVELOPERS TO CUT DOWN TREES AND RE-GRADE IN THE RPA — INCLUDING ON SCHOOL, COUNTY PARK AND OTHER PUBLIC SITES. ENACT MORE STRINGENT REGULATIONS TO MINIMIZE IMPERVIOUS SURFACES. ENABLE CITIZENS AND STAFF TO WORK WITH DEVELOPERS/BUILDERS BEFORE THEY FILE PLANS AND PERMITS TO FIND LESS ENVIRONMENTALLY DAMAGING ALTERNATIVES. WITH PROPER PLANNING, DEVELOPMENT DOESN'T HAVE TO RAPE THE LAND. "Preserving undisturbed vegetative cover during land development is a much more cost effective approach than destroying these features and having to construct new stormwater management practices to replace the functions they originally provided." http://www.cwp.org/reducing-stormwater-runoff/	6/21/2019 1:26 PM
104	Yes. Reduce the amount of imperviousness surfaces and improve the canopy cover.	6/21/2019 9:41 AM
105	Too many dead trees , old concrete , exposed pipes. I've been a " friend of Gulf Branch ' for 25 years. The county has not improved our park at Glebe (unsafe and horrible playground equipment) They repaired steps to ' no where '.. instead of having them land onto a nature path .(steep area from steps to bridge across creek should have been naturalized)	6/21/2019 6:30 AM
106	Nature center and trail protection/trail access and related recreation elements.	6/20/2019 6:51 PM
107	N/a	6/20/2019 5:06 PM
108	ery area, including grasses and ground cover that can tolerate the disturbed soil.	6/20/2019 4:16 PM
109	Plant new trees	6/20/2019 11:21 AM
110	There are some areas within the stream that have become a bit dangerous when kids and dogs are trying to climb and play.	6/20/2019 11:00 AM
111	There appear to be considerable iron deposits in the water coming from the large pipe running under the Utah St. floodplain. The Gulf Branch, at this point, has an orange tint (see 2b). Can this be fixed during the restoration?	6/19/2019 4:15 PM
112	Leave it in its current condition as much as possible. Add more vegetation. remove ivy from trees.	6/19/2019 7:41 AM
113	no	6/12/2019 5:56 AM
114	f	6/11/2019 12:08 PM

Q6 What considerations should we take into account as we develop the stream restoration design? Think about the long-term use of the areas and how it will look after construction is complete.

Answered: 114 Skipped: 62

#	RESPONSES	DATE
1	Protect the stream	8/24/2019 5:42 PM
2	Streams are often used for recreation by children.	8/13/2019 3:12 AM
3	Use of indigenous plant species, accessibility for those who are disabled (where possible), overall incorporation of universal design principles.	8/12/2019 1:00 PM
4	Climate change & natural area restoration	8/12/2019 4:33 AM
5	Trails along side the stream	8/11/2019 6:05 AM
6	Reopen to public asap	8/10/2019 6:07 AM
7	NA	8/10/2019 12:03 AM
8	use step pools and meanders to greatest degree possible; remove old "infrastructure"----e.g., the exposed concrete wall upstream of the nature center----site#2 above	8/9/2019 2:09 PM
9	Site 4 is close to a school but due to erosion has little flow. More flow, which would create a animal habitat, would improve the educational value of this portion of the stream.	8/9/2019 11:16 AM
10	That the natural setting be kept.	8/9/2019 8:57 AM
11	Make it more natural rather than what was done to four mile run.	8/9/2019 8:23 AM
12	Keep it looking natural	8/9/2019 8:16 AM
13	It would be nice if we could have some deeper sections in the stream to allow kids to play in during the summer	8/9/2019 8:14 AM
14	Think about increasing frequency of intense storms (rainfall) and design for more intense storms	8/9/2019 7:27 AM
15	What you were able to do with Windy Run is actually really nice. I understand that some of the pools might not look totally natural for some folks, but for the benefits they provide, I think you did a great job helping them blend in.	8/8/2019 5:35 AM
16	Something replicable / applicable across county like erosion issues at Lubber Run off Rte 50	8/7/2019 11:32 PM
17	.	8/7/2019 11:26 PM
18	That the plans be well thought out and designed to last. (EG don't repeat that silly "Bridge to Nowhere" just down from Military Rd and stairs going down from side street that took a lot of \$ and effort and now is not usable).	8/7/2019 3:19 PM
19	Long term durability	8/7/2019 1:32 PM
20	Try to keep it as "natural" as possible	8/7/2019 1:21 PM
21	All the usual stuff.	8/7/2019 12:57 PM
22	Improved trails	8/7/2019 10:53 AM
23	Don't know	8/7/2019 9:34 AM
24	kids and dogs playing on the embankment	8/7/2019 7:42 AM
25	prevent run-off and erosion	8/7/2019 5:32 AM
26	hiking trails are maintained In good condition.	8/7/2019 5:24 AM
27	Bridges or concrete pillars at all stream crossings.	8/7/2019 5:02 AM

Gulf Branch Stream Restoration Summer 2019 Feedback

28	Minus the eroding banks and semi-exposed drainage/sewer pipes I liked the rustic aspects before the flash flood. Would like to see that aspect maintained vs a highly engineered restoration of the trails. Keep it wild!	8/7/2019 4:17 AM
29	keep it natural - leave hiking trails as dirt trails	8/7/2019 3:34 AM
30	Please do not narrow the stream if doing so will make it easier for houses to flood Arlington keeps approving new apartment developments and now additional building on residential property Where will the storm water go?	8/7/2019 3:23 AM
31	Longevity of fixes	8/6/2019 8:37 PM
32	Use binned rock rather than concrete	8/6/2019 5:33 PM
33	We need to think about park preservation and the integrity of trails that go through the parks.	8/6/2019 5:06 PM
34	The connection to flood plain does increase mosquitoes.	8/6/2019 4:59 PM
35	Increased temperature in the area and hardening of surrounding surfaces	8/6/2019 4:35 PM
36	Keep it natural for hikers and walkers	8/6/2019 3:00 PM
37	Use the best science available. Do no harm.	8/6/2019 2:50 PM
38	Building sustainable trails so people can enjoy nature.	8/6/2019 1:56 PM
39	Keeping the paths within sight of the stream while not impacting it, I think one of the large draws of the park is the stream. Some of the areas below military road are significantly eroded and need alot of work.	8/6/2019 9:09 AM
40	passive recreation, natural green space and trails are critical	8/6/2019 8:24 AM
41	Preserve mature trees; do not broaden the flood plain.	8/4/2019 4:47 AM
42	There should be a reasonable walking trail along the stream afterwards.	8/2/2019 4:42 PM
43	Restore tree canopy to original coverage. Improve trails.	8/2/2019 12:04 PM
44	Minimize use of heavy equipment and tree loss. Except for trees directly impacted by root erosion, no tree with over a one foot diameter should be lost. Planting is no substitute for mature tree loss. Emphasize reduction of hardscape in drainage area, create rain gardens and run-off reduction measures.	8/1/2019 7:32 AM
45	Blending with man-made trails.	7/28/2019 9:25 AM
46	Needs to have mitigation in the surrounding watershed to prevent recurrence of damage. Aggressive marketing of rain barrel use, rain gardens and permeable surface reduction.	7/28/2019 9:01 AM
47	Keep it natural looking and not too developed.	7/27/2019 8:20 PM
48	See above. Though perhaps not as important in this watershed, address any ways to address additional runoff from new impermeable areas (patios)/significant alterations (>50% of constructed value), and any street reconstruction.	7/25/2019 5:25 AM
49	Maintaining safe walkable paths to enjoy	7/24/2019 1:38 AM
50	NA	7/23/2019 3:31 PM
51	More trees and buffer vegetation, less paved or grassy areas--even if it means fewer sports areas	7/21/2019 4:07 PM
52	Maintain walkability of the trails, and preserve the peaceful scenic atmosphere	7/21/2019 11:37 AM
53	Needs to maintain a natural, not artificial, appearance	7/21/2019 10:26 AM
54	Make sure the nature center is in good shape.	7/21/2019 8:44 AM
55	Reroute the trail(s) so that they do not undermine the stream banks post restoration.	7/20/2019 1:46 PM
56	Reducing run-off pollution, maintaining accessibility for playing in the stream	7/20/2019 9:38 AM
57	Special attention to the pedestrian bridges so they will not be washed out n the future.	7/20/2019 5:48 AM
58	safety and accessibility of Gulf Branch Nature Center area; safety and accessibility of trails along Gulf Branch to the river	7/19/2019 11:58 AM
59	Strategic installation of footbridges in areas that are least likely to sustain flood damages.	7/19/2019 9:56 AM

Gulf Branch Stream Restoration Summer 2019 Feedback

60	Use only local genotype native plants with as much diversity as possible.	7/18/2019 6:07 PM
61	Na	7/18/2019 5:09 PM
62	Will more land in the surrounding area be allowed to be built on close enough to allow more runoff into the stream	7/18/2019 3:38 PM
63	Keep it natural.	7/18/2019 1:00 PM
64	Add in requirements from recent floods	7/18/2019 12:57 PM
65	N	7/18/2019 12:31 PM
66	Wider trails near the streams would help in so many ways -- making trails more inviting, allowing people to easily pass one another, making it easier to avoid poison ivy, for example. Also people would be less likely to walk off the trails which might help prevent further erosion.	7/18/2019 12:13 PM
67	i don't know this area	7/18/2019 9:28 AM
68	Long-term, I believe we need to prevent permanent damage and erosion that threatens structures and access.	7/18/2019 8:28 AM
69	Keep as natural looking as possible.	7/17/2019 8:14 AM
70	Durable designs, withstanding the increasingly extreme weather	7/17/2019 7:51 AM
71	I like the park as is, with very low-key structures that keep it feeling as "wild" as possible. So restoration needs to address erosion, but not make it feel like a manicured space.	7/17/2019 2:55 AM
72	Walking through the woods along the stream is a major attraction to living in our area. Therefore all foot paths and bridges should be maintained, rebuilt if necessary	7/16/2019 2:46 PM
73	Longevity and being able to withstand major storms effectively as possible	7/16/2019 11:18 AM
74	Ability to cope with large flood events like 7/8/19	7/16/2019 10:25 AM
75	Please keep it looking as natural as possible.	7/16/2019 5:07 AM
76	Preservation of green space and recreational area	7/16/2019 5:03 AM
77	Diverting storm flow.	7/14/2019 7:49 PM
78	Having a place where small children can play near the water's edge would be a very nice if damage can be limited to one area. The sound of the stream. Having occasional benches where you could sit down and read or just meditate would be ideal.	7/12/2019 11:50 AM
79	Maybe a boardwalk area to reduce erosion from foot traffic and perhaps enable people with mobility issues to more easily access the area. Also, a placard or two identifying local flora and fauna would be nice.	7/10/2019 8:39 PM
80	I don't know	7/10/2019 8:20 AM
81	Retain access to the creek system, at key points, for families and pets (walk/climb down).	7/9/2019 1:12 PM
82	Prevent sewer pipe water from entering streams.	7/9/2019 12:28 PM
83	Minimal restoration is best. Where the stream is not wide enough, it will widen itself (see Donaldson Run, Branch B)	7/8/2019 10:47 AM
84	invasive plant removal and replanting of natives	7/8/2019 10:36 AM
85	Think of all the residents. Not just humans	7/7/2019 6:11 AM
86	Gulf Branch is a central part of growing up in our neighborhood. I'd like for the restoration to take into account the many children that use the nature center on a daily basis.	7/7/2019 3:32 AM
87	Easy access to level areas near the water to encourage people to watch wildlife.	7/2/2019 6:38 AM
88	Life span of solutions.	7/1/2019 5:37 AM
89	attracting birds and butterflies; boardwalk if possible	6/30/2019 6:06 AM
90	NA	6/29/2019 8:57 AM
91	the design should include new native tree & shrub planting as necessary to keep the area looking natural. The nature center could offer guided tours during and after the construction.	6/27/2019 2:48 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

92	restore cleaner water and wildlife can return. As a kid in the 60's there were frogs, salamanders, and crayfish. Now places have this nasty orange water and I am afraid to take my grandkids there for a hike near water.	6/27/2019 1:51 PM
93	Keeping the streams litter-free.	6/27/2019 3:48 AM
94	The valley is too deep in most places to use a "flood plain" strategy. This is a stream that drops close to 70 feet in elevation over the course of less than a mile. I think that the priority should be protection of the banks via the use of stone. Also, in area 3 it would be possible to raise the level of the creek substantially through the use of a series of step basins.	6/26/2019 6:09 PM
95	Minimize disruption to the surroundings while renovation is occurring and maintain a seamless design flow in harmony with the streams natural ecosystem.	6/26/2019 3:57 PM
96	Do not remove any existing trees over 6" diameter without severely exposed roots.	6/26/2019 1:55 PM
97	Don't forget the periodic to access the stream.	6/26/2019 1:35 PM
98	Reducing runoff into Potomac, encouraging retention of trees, providing habitat for wildlife.	6/26/2019 1:10 PM
99	n	6/25/2019 11:15 AM
100	Prioritize natural aesthetic.	6/23/2019 5:28 PM
101	Do not harm trees. Do not create step pools or other features that encourage the proliferation of vegetation that robs the water of oxygen.	6/22/2019 1:13 PM
102	Restoring rich habitat values and preserving walkability of the stream to the river	6/21/2019 2:43 PM
103	STOP using outdated models and techniques that scientists have documented are counter-productive and harmful. Use current science and work with experts in this field — the U. of MD is nearby and is a good resource for the most currently available, scientifically valid ways to restore streams to ecologically viable systems rather than the dead, glorified stormwater runoff channels that you are creating. Killing a stream to "save" a stream is bad policy and causes catastrophic ecological damage — perhaps irreversible damage. PLEASE JUST STOP. See https://www.researchgate.net/publication/51662579_River_Restoration_The_Fuzzy_Logic_of_Repairing_Reaches_to_Reverse_Catchment_Scale_Degradation (2011) and https://www.baltimoresun.com/maryland/baltimore-county/bs-md-stream-restoration-20141009-story.html (2014) and https://marylandreporter.com/2018/11/28/bay-scientists-say-stream-restoration-notdelivering-as-much-as-hoped/ (2018). I presume you folks have an Internet connection and know how to use Google for basic searches of the current literature? Why not try that first? "One key take-away for local officials, planners, and design professionals: Do as much as you can to keep those old trees in place. It will be much harder to accomplish the same positive climate impact with younger trees." https://dirt.asla.org/2014/01/24/older-trees-absorb-more-carbon/ . "Preserving undisturbed vegetative cover during land development is a much more cost effective approach than destroying these features and having to construct new stormwater management practices to replace the functions they originally provided." http://www.cwp.org/reducing-stormwater-runoff/ .	6/21/2019 1:26 PM
104	Data shows that stream restoration is not effective. So-called "restorations" frequently kill streams by increasing water temperature and reducing oxygen. So we are spending millions for counterproductive outcomes. Since 2011, the work of scientists Emily Bernhardt, Margaret Palmer and others have shown that the types of "restoration" projects conducted here in Arlington and elsewhere fail to achieve basic ecological and water quality goals: https://www.researchgate.net/publication/51662579_River_Restoration_The_Fuzzy_Logic_of_Repairing_Reaches_to_Reverse_Catchment_Scale_Degradation	6/21/2019 9:41 AM
105	I live here. The park is my heart. I have worked to remove invasives, clean trash from the creek, make a natural pooling area where I could .This park is a highly valuable resources for those of us who appreciate nature. It's our Central Park. Wish it had more thoughtful contemplative areas.. along the creek .. better play equip at top playground (small playground next to tennis court , not lower playground which could be removed and consolidated to higher playground.. better as not as near to creek so less mosquitos).	6/21/2019 6:30 AM
106	NATURAL FLOODPLAIN ELEMENTS wherever possible. I was inspired to contribute feedback after noticing a beautiful natural floodplain stream restoration on Turkeycock Run, Mason District Park in Fairfax County.	6/20/2019 6:51 PM
107	N/a	6/20/2019 5:06 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

108	Please take into account the disturbance to the soil and destruction of soil packets due to moving the soil. Also please plant native species in the recov	6/20/2019 4:16 PM
109	n	6/20/2019 11:21 AM
110	It is currently very rustic, natural and beautiful (aside from the erosion) and is a lovely pocket of natural habitat while so much of arlington is being built-up. I hope it would not lose that open space natural feeling.	6/20/2019 11:00 AM
111	Create more water bars and slope erosion control bars on the trail from the Nature Center to the tennis courts along the stream. Maintain existing trails. Do not construct new ones.	6/19/2019 4:15 PM
112	Leave as much natural as possible preserving one of the last remaining areas in Arlington. The County's own survey said that this is the biggest unmet recreation need and the one that they would most like to see the County invest in. Instead of stream restoration, a full out program to reduce runoff at the source should begin. The County needs to make a much larger commitment to this. The Chesapeake Bay Foundation has become far more skeptical about the value of stream restoration saying in particular that steep wood streams are not good candidates. Preserving trees in contrast is an important method to absorb rainwater and control soil erosion.	6/19/2019 7:41 AM
113	no	6/12/2019 5:56 AM
114	f	6/11/2019 12:08 PM

Q7 What considerations should we take into account as we plan the stream restoration construction? Think about the short-term use of the areas during construction of the stream restoration project.

Answered: 114 Skipped: 62

#	RESPONSES	DATE
1	Ensure it will still be accessible for walks during construction	8/24/2019 5:42 PM
2	Schools of elementary students visit the steams as a lesson.	8/13/2019 3:12 AM
3	N/A	8/12/2019 1:00 PM
4	Improved stormwater drainage to reduce flooding is especially important due to climate change & sea level rise.	8/12/2019 4:33 AM
5	Trails along side the stream	8/11/2019 6:05 AM
6	Keep some access to Potomac if possible during project	8/10/2019 6:07 AM
7	NA	8/10/2019 12:03 AM
8	somehow make the trails in the woods accessible from all access points (e.g., from large field on Utah	8/9/2019 2:09 PM
9	Potential negative effects on existing native plants	8/9/2019 11:16 AM
10	If there is any closure of the nature center parking lot to provide signage and to provide go walking access to the nature center.	8/9/2019 8:57 AM
11	.	8/9/2019 8:23 AM
12	If you have to close areas to do restoration, that's fine. Currently areas are closed due to storm damage.	8/9/2019 8:16 AM
13	Try to provide alternate routes for walking during the period	8/9/2019 8:14 AM
14	n/a	8/9/2019 7:27 AM
15	Keeping as much access for people walking sounds great--even if it's a well marked detour.	8/8/2019 5:35 AM
16	Plan around "low season" for use - guessing that's fall / winter?	8/7/2019 11:32 PM
17	.	8/7/2019 11:26 PM
18	Advance notice and signage to users.	8/7/2019 3:19 PM
19	I would happily sacrifice some short term use for a good long term solution	8/7/2019 1:32 PM
20	Do whatever you need to do to make it right. That may inconvenience people, but better long term improvement m	8/7/2019 1:21 PM
21	All the usual stuff.	8/7/2019 12:57 PM
22	Get it done as quickly as possible.	8/7/2019 10:53 AM
23	Minimize damage from flooding	8/7/2019 9:34 AM
24	using natural materials	8/7/2019 7:42 AM
25	Get this done quickly	8/7/2019 5:32 AM
26	crayfish should be restored, they were everywhere in the 80's	8/7/2019 5:24 AM
27	If possible, provide alternate access to the PHT along Gulf Branch or signage on 36th Rd N indicating PHT access is blocked.	8/7/2019 5:02 AM
28	Disruption during restoration is a given and temporary so I'm not very concerned by it.	8/7/2019 4:17 AM
29	keep it clean	8/7/2019 3:34 AM

Gulf Branch Stream Restoration Summer 2019 Feedback

30	No	8/7/2019 3:23 AM
31	None	8/6/2019 8:37 PM
32	Close the park/trails as required to do the job completely and correctly	8/6/2019 5:33 PM
33	Do your best to allow for residential use of the parks during restoration.	8/6/2019 5:06 PM
34	Safety and further debris.	8/6/2019 4:59 PM
35	Continue education of users to ways in which use is compatible with restoration	8/6/2019 4:35 PM
36	Low impact to natural look	8/6/2019 3:00 PM
37	Continue to educate the public, especially around construction so residents understand why.	8/6/2019 2:50 PM
38	Try to keep hiking trails open.	8/6/2019 1:56 PM
39	Keeping the trails active if possible.	8/6/2019 9:09 AM
40	keep some trails open if possible, minimal impacts to trees and wildlife	8/6/2019 8:24 AM
41	Restrict heavy equipment which will affect the stream quality and tree roots	8/4/2019 4:47 AM
42	Roads should remain passable. Construction equipment should be out of the way as much as possible.	8/2/2019 4:42 PM
43	No comments	8/2/2019 12:04 PM
44	Minimize short-term use of non-hardscape areas for construction	8/1/2019 7:32 AM
45	Maintain access to trails.	7/28/2019 9:25 AM
46	Keeping trails available for use.	7/28/2019 9:01 AM
47	Keeping parts open for users.	7/27/2019 8:20 PM
48	Long term plan to maintain/ reduce increased stormwater flows and address stormwater problems from last 50 years of development.	7/25/2019 5:25 AM
49	Making it ascetically appealing	7/24/2019 1:38 AM
50	NA	7/23/2019 3:31 PM
51	Control sediment runoff and avoid tree removal	7/21/2019 4:07 PM
52	Will people still be able to walk along the trails? Will the nature center and parking lot still be accessible?	7/21/2019 11:37 AM
53	Needs to maintain a natural, not artificial, appearance	7/21/2019 10:26 AM
54	Try to keep costs within the budget.	7/21/2019 8:44 AM
55	Maintain access to Nature Center; provide signs to route hikers around the site so that people can still get to the river	7/20/2019 1:46 PM
56	Maintaining access to walking trails	7/20/2019 9:38 AM
57	Minimize disruption to those of us who use Gulf Branch regularly.	7/20/2019 5:48 AM
58	minimize any access restrictions	7/19/2019 11:58 AM
59	Try to avoid restricting pedestrian access to trails that cross stream beds (i.e. Glebe Rd Park trail to Gulf Branch nature Center)	7/19/2019 9:56 AM
60	Limit access by car.	7/18/2019 6:07 PM
61	Na	7/18/2019 5:09 PM
62	Removing only plants and trees that are necessary. Replacing plants and trees in places where they can live for a long time, not just a quick fix.	7/18/2019 3:38 PM
63	Use signage to explain what is occurring and why. And take the opportunity to include benches since during cknstruction the focus may be more socialization/discussion about restoration, so help create a positive environment for it.	7/18/2019 1:00 PM
64	Fix bridges	7/18/2019 12:57 PM
65	N	7/18/2019 12:31 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

66	Perhaps work on one side of Military Road at a time?	7/18/2019 12:13 PM
67	i don't know this area	7/18/2019 9:28 AM
68	Three things. 1. Need to absolutely minimize impact on surrounding residents — can't park heavy machinery on streets, have unnecessary delay in the project (weeks of nothing happening), ensure contractors are respectful of neighbors (no litter, trash, cigarette butts everywhere), machinery needs to be safely stored in the evenings, and absolutely cannot eliminate the community's ability to use the meadow in Broyhill Forest Park — I understand some of the area may be needed for staging but that is the primary open space for the entire neighborhood and our children play there every day. If the meadow is significantly impacted for a significant amount of time, you will have lots of unhappy residents. 2. Maintain access to the stream paths — do not execute construction in a manner that closes access to the area and prevents the community from continuing to access the path down to the Potomac from Broyhill Forest and through the nature preserve. 3. Communicate well about status and plans.	7/18/2019 8:28 AM
69	Keep the toe paths open as much as possible	7/17/2019 8:14 AM
70	Access to Gulf Branch Nature Center at all times	7/17/2019 7:51 AM
71	I like the park as is, with very low-key structures that keep it feeling as "wild" as possible. So restoration needs to address erosion, but not make it feel like a manicured space.	7/17/2019 2:55 AM
72	People will want to be able to walk through the woods during construction and will not want their properties affected	7/16/2019 2:46 PM
73	Pedestrian traffic along Military Road - safety first	7/16/2019 11:18 AM
74	ldk	7/16/2019 10:25 AM
75	Recreational use of the stream valley	7/16/2019 5:07 AM
76	Reduced flooding in area	7/16/2019 5:03 AM
77	Turn stream restoration into an educational experience. Get community involvement.	7/14/2019 7:49 PM
78	Decreasing compaction of the soil, exposed tree roots, and any rare native plants would be his consideration.	7/12/2019 11:50 AM
79	I have no opinion	7/10/2019 8:39 PM
80	Broyhill Forest park is used A LOT by neighborhood kids. I would be worried if construction was staged there.	7/10/2019 8:20 AM
81	For active walkers in the woods, provide directions via arrows/cones for alternative paths as things get further developed.	7/9/2019 1:12 PM
82	areas should remain open to the public during any construction.	7/9/2019 12:28 PM
83	disturb the area as little as possible	7/8/2019 10:47 AM
84	remove as few trees as possible	7/8/2019 10:36 AM
85	Stop the damage	7/7/2019 6:11 AM
86	Please make sure that parts of the area are accessible for use during the construction phase.	7/7/2019 3:32 AM
87	Keep people out	7/2/2019 6:38 AM
88	Keeping open trail access whenever possible.	7/1/2019 5:37 AM
89	use sustainable materials	6/30/2019 6:06 AM
90	NA	6/29/2019 8:57 AM
91	during construction, try to leave hiking trails open and accessible.	6/27/2019 2:48 PM
92	Restore in Phases so some parts can be used while some other parts are under restoration.	6/27/2019 1:51 PM
93	Enable us still to walk through the park!	6/27/2019 3:48 AM
94	Preservation of the existing trees.	6/26/2019 6:09 PM
95	See above comment	6/26/2019 3:57 PM
96	Do not remove any existing trees over 6" diameter without severely exposed roots.	6/26/2019 1:55 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

97	Avoid stressing any particular area.	6/26/2019 1:35 PM
98	Providing alternative paths thru the park.	6/26/2019 1:10 PM
99	n	6/25/2019 11:15 AM
100	Limited disruption to Military rd. Keep trail down to Potomac open.	6/23/2019 5:28 PM
101	Offer to brief neighboring civic associations, or send them information they can send neighbors. If you enable civic associations to help you inform people before you "dig up" a neighborhood stream, neighbors will support the improvements, rather than worry about the "construction." Show that you are being very careful NOT to increase water runoff into people's yards.	6/22/2019 1:13 PM
102	I don't know	6/21/2019 2:43 PM
103	STOP CUTTING DOWN RIPARIAN TREES. STOP USING HEAVY EARTH-MOVING EQUIPMENT. THIS DOES NOTHING BUT CAUSE THE PROLIFERATION OF INVASIVES, WHICH YOU THEN CANNOT CONTROL. STOP USING TECHNIQUES THAT INCREASE STREAM WATER TEMPERATURE, WHICH LEADS TO ANOXIC CONDITIONS AND DEATH OF PRETTY MUCH ALL LIFE IN OUR STREAMS. SEE THE ANSWERS AND LITERATURE REFERENCES PROVIDED ABOVE. "One key take-away for local officials, planners, and design professionals: Do as much as you can to keep those old trees in place. It will be much harder to accomplish the same positive climate impact with younger trees." https://dirt.asla.org/2014/01/24/older-trees-absorb-more-carbon/ . "Mature trees provide significant stormwater quantity and rate control benefits through soil storage, interception, and evapotranspiration.... Interception and evapotranspiration also decrease runoff volume with larger trees providing exponentially more benefit than smaller trees." https://www.epa.gov/sites/production/files/2016-11/documents/final_stormwater_trees_technical_memo_508.pdf	6/21/2019 1:26 PM
104	Empirical evaluation of a variety of channel-based restoration projects documented little evidence of ecologically successful outcomes.... Restored urban streams in North Carolina were found to have significantly higher temperatures than unrestored urban streams as a result of removing riparian trees to facilitate restoration projects(Sudduth et al.2011). Filoso and Palmer (2011) show that efforts to reduce the flux of nitrogen to coastal waters through hydrogeomorphic stream restoration approaches are rarely successful.... Despite a lack of measurable ecological improvement (sensu Palmer et al. 2005), most restoration practitioners consider their projects to be successful (Bernhardt etal. 2007, Jähnig et al. 2011).	6/21/2019 9:41 AM
105	The nature center should be enhanced to be more like Fort Smith. it is our only building in this community and could be better presented as a resource for meetings, weddings etc. The creek behind the log cabin is horrible. Old concrete where a beautiful ponding creek element could be created to allow citizens to enjoy the stream's beauty.	6/21/2019 6:30 AM
106	I can't think of any.	6/20/2019 6:51 PM
107	N/a	6/20/2019 5:06 PM
108	Use of the areas during construction can be effected using tree, plant and construction fencing.	6/20/2019 4:16 PM
109	n	6/20/2019 11:21 AM
110	Ease of still accessing some areas during construction would be important, including the nature center.	6/20/2019 11:00 AM
111	Keep the macadam road and existing trails open, if possible. Minimize habitat destruction to the south side of the stream.	6/19/2019 4:15 PM
112	Any construction that is absolutely necessary should be conducted to remove as few trees as possible and disturb as little land surface as possible. The construction materials and equipment should require the least intrusive options. Large land moving equipment is unacceptable. Much smaller equipment is available and can be used to significantly reduced the area that must be touched	6/19/2019 7:41 AM
113	no	6/12/2019 5:56 AM
114	f	6/11/2019 12:08 PM

Q8 What do you value about the streams, parks and land along Gulf Branch?

Answered: 114 Skipped: 62

#	RESPONSES	DATE
1	Beautiful place to take your children, love the sound of the stream, refuge from the cold winds in the wintertime.	8/24/2019 5:42 PM
2	Constant open access	8/13/2019 3:12 AM
3	Provide access to nature, serve as a natural buffer for flooding etc.	8/12/2019 1:00 PM
4	Use the Nature Center regularly	8/12/2019 4:33 AM
5	I think it is a nice local park for Arlington County residents and users visitors to use	8/11/2019 6:05 AM
6	The trails, nature, water.	8/10/2019 6:07 AM
7	Accessibility	8/10/2019 12:03 AM
8	wildlife, hiking the trails, peace, places to share with my dog	8/9/2019 2:09 PM
9	Being able to walk along them and observe a thriving animal habitat.	8/9/2019 11:16 AM
10	I value above anything that it is a natural area harboring various animals and plants	8/9/2019 8:57 AM
11	.	8/9/2019 8:23 AM
12	Great place to walk	8/9/2019 8:16 AM
13	Peaceful place in the city for walking and relaxing	8/9/2019 8:14 AM
14	Important to local ecology as well as to Potomac River and Bay as whole system	8/9/2019 7:27 AM
15	They're these lovely little worlds that feel so different, distinct and remote while being accessible.	8/8/2019 5:35 AM
16	Nature center and surrounding area for toddler	8/7/2019 11:32 PM
17	.	8/7/2019 11:26 PM
18	Everything! But especially the greenery and the trails— an amazing natural resource that makes Arlington special.	8/7/2019 3:19 PM
19	I love having so many different parks nearby where I can take my children on days when we only have an hour or two to get outside.	8/7/2019 1:32 PM
20	Nature. Beauty. Serenity. Home for wildlife. Makes Arlington special.	8/7/2019 1:21 PM
21	Natural beauty, access for exercise.	8/7/2019 12:57 PM
22	A natural setting that is close to where I live.	8/7/2019 10:53 AM
23	green space	8/7/2019 9:34 AM
24	great	8/7/2019 7:42 AM
25	Nature as a whole	8/7/2019 5:32 AM
26	access to outdoor activities	8/7/2019 5:24 AM
27	.	8/7/2019 5:02 AM
28	Prior to the flash flood I've walked Gulf Br many times, from the N. Old Glebe access as far as I could safely go which was almost to the GW Pky bridge. It has been one of my favorite walks and I am distressed to see the erosion.	8/7/2019 4:17 AM
29	Natural environment	8/7/2019 3:34 AM
30	Nice place to visit	8/7/2019 3:23 AM
31	Communing with nature	8/6/2019 8:37 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

32	Defined paths, focus on the vibrancy of indigenous plants	8/6/2019 5:33 PM
33	The trees. Please do your best to preserve those during restoration.	8/6/2019 5:06 PM
34	Beauty and natural space.	8/6/2019 4:59 PM
35	The presence of parkland and undeveloped areas in my neighborhood.	8/6/2019 4:35 PM
36	natural hiking so close to home	8/6/2019 3:00 PM
37	A protected place for ecosystems.	8/6/2019 2:50 PM
38	Peace and quiet in nature.	8/6/2019 1:56 PM
39	They provide natural respite in a rapidly sub-urbanizing region. While you can usually hear cars, you can sometimes not even see houses, providing a important connection to the land itself. I've grown up in this area and the parks system, and Gulf Branch in particular, with its path from the outfall to the river, are a vital resource for the people of Arlington.	8/6/2019 9:09 AM
40	walking to the river, peepers	8/6/2019 8:24 AM
41	Trees and shade to cool the habitat and visitors -- strongly oppose measures that would remove the tree canopy.	8/4/2019 4:47 AM
42	Educational opportunities for kids via the Nature Center. And walking trails.	8/2/2019 4:42 PM
43	Fun place to walk	8/2/2019 12:04 PM
44	Forested landscape	8/1/2019 7:32 AM
45	Public access.	7/28/2019 9:25 AM
46	They are really beautiful and well used.	7/28/2019 9:01 AM
47	Nature, solitude, and being able to hike.	7/27/2019 8:20 PM
48	Addressing Environmental impact of stormwater on parkland, the Potomac, and the Bay	7/25/2019 5:25 AM
49	Outdoor space for appreciating and connecting with nature while getting exercise	7/24/2019 1:38 AM
50	Natural open space	7/23/2019 3:31 PM
51	Natural vegetation, forest area, and native plants	7/21/2019 4:07 PM
52	The woody, shady setting, and the sound of the stream	7/21/2019 11:37 AM
53	A reconnection to nature despite suburban sprawl	7/21/2019 10:26 AM
54	It is a beautiful park, with a wonderful nature center.	7/21/2019 8:44 AM
55	Beauty, nature, ecological services, place for children to experience natural processes	7/20/2019 1:46 PM
56	Ability to spend time in nature	7/20/2019 9:38 AM
57	Walking trails	7/20/2019 5:48 AM
58	great place for a hike; wonderful Nature Center	7/19/2019 11:58 AM
59	Place for recreation and undeveloped tranquility amidst suburban setting.	7/19/2019 9:56 AM
60	The pool for tadpoles and salamander breeding.	7/18/2019 6:07 PM
61	Na	7/18/2019 5:09 PM
62	They are important to the area ecosystem as well as for leisure use.	7/18/2019 3:38 PM
63	The woods, the stream, the pond, the nature center—something for everyone—including the family dogs!	7/18/2019 1:00 PM
64	Trails and peacefulness	7/18/2019 12:57 PM
65	N	7/18/2019 12:31 PM
66	It is a wonderful place to walk, shady and cool and lovely. But the trails and streams have been neglected and I often go to Donaldson Run instead.	7/18/2019 12:13 PM
67	i don't know this area	7/18/2019 9:28 AM
68	I enjoy the access to the Potomac and the serenity of the nature preserve.	7/18/2019 8:28 AM

Gulf Branch Stream Restoration Summer 2019 Feedback

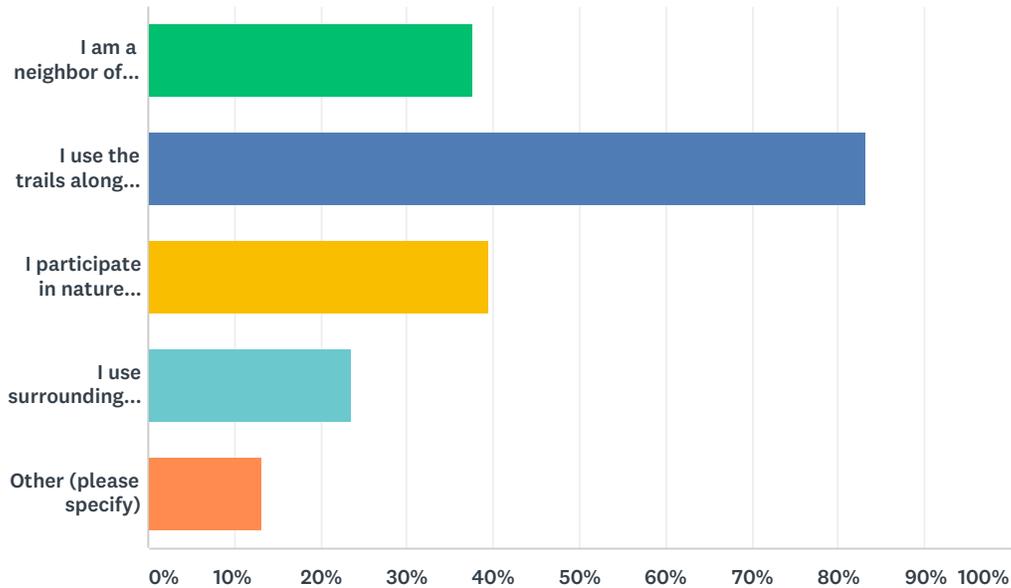
69	The beauty, the wildlife, and the uniqueness to our neighborhoods and nature centers.	7/17/2019 8:14 AM
70	It is our "WILD NATURE area" to all who live in the neighborhoods around	7/17/2019 7:51 AM
71	Natural appearance. Paths are walk-able and cleared and natural -- not paved.	7/17/2019 2:55 AM
72	Being able.to walk through	7/16/2019 2:46 PM
73	Nearby access to nature in an urban environment along with opportunities for all (young and old) to learn and appreciate these things	7/16/2019 11:18 AM
74	There diversity	7/16/2019 10:25 AM
75	Wildlife habitat, recreational nature	7/16/2019 5:07 AM
76	Enjoyable walk in woods	7/16/2019 5:03 AM
77	Native habitat, serenity, contact with natural world.	7/14/2019 7:49 PM
78	The sound of the stream.	7/12/2019 11:50 AM
79	Gulf Branch is a vital and beautiful asset to this community.	7/10/2019 8:39 PM
80	I like to walk the trails. I appreciate the shade especially when it's hot out. Our dog loves the streams.	7/10/2019 8:20 AM
81	Everything.	7/9/2019 1:12 PM
82	Great place to take children to quickly get in a walk in nature.	7/9/2019 12:28 PM
83	natural areas, hiking trails, nature center	7/8/2019 10:47 AM
84	habitat for birds and other wildlife	7/8/2019 10:36 AM
85	Connecting with nature	7/7/2019 6:11 AM
86	We love them!! We hike through on a weekly basis and our property shares land with the nature center. It is WHY WE LIVE HERE.	7/7/2019 3:32 AM
87	Tranquility	7/2/2019 6:38 AM
88	Access to local nature trails & mitigation of local flooding.	7/1/2019 5:37 AM
89	ability to get out in nature / bird	6/30/2019 6:06 AM
90	NA	6/29/2019 8:57 AM
91	I value the hiking trails, and natural setting away from cars and development.	6/27/2019 2:48 PM
92	that they are not polluted and don't erode away	6/27/2019 1:51 PM
93	The beauty, the quiet, the birds and small animals.	6/27/2019 3:48 AM
94	Forest canopy, elimination of poison ivy, and the educational features of nature center, cabin and blacksmith's shed.	6/26/2019 6:09 PM
95	The natural beauty, tranquility and the large canopy of trees that keep it like a forest.	6/26/2019 3:57 PM
96	Natural landscape including mature trees.	6/26/2019 1:55 PM
97	Every thing. They provide shade, increased absorption of surface water, great habitat for Arlington's flora and fauna, play and meditation apace.	6/26/2019 1:35 PM
98	It is a haven from all of the awful development/tree removal going on in North Arlington!	6/26/2019 1:10 PM
99	n	6/25/2019 11:15 AM
100	Hike in nature right amid housing that doesn't feel surrounded.	6/23/2019 5:28 PM
101	I value the natural state of streams, parks and land along Gulf Branch. I support measures to preserve their natural state, and oppose measures to change the natural state of streams, parks and land in order to provide other forms of recreation.	6/22/2019 1:13 PM
102	Mature canopy, bird and other wildlife populations	6/21/2019 2:43 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

103	<p>These scarce and highly valuable natural resources are being stressed to the brink of collapse. The trees, streams and the biological diversity in these natural areas perform important functions — functions that support human health — like mitigating urban heat, filtering pollutants from the air and water, absorbing stormwater runoff, etc. “One key take-away for local officials, planners, and design professionals: Do as much as you can to keep those old trees in place. It will be much harder to accomplish the same positive climate impact with younger trees.”</p> <p>https://dirt.asla.org/2014/01/24/older-trees-absorb-more-carbon/. “... [L]arge, healthy trees greater than 77 centimeters (30 inches) in diameter remove 70 times more air pollution annually than small, healthy trees less than eight centimeters (three inches) in diameter.”</p> <p>https://nextcity.org/daily/entry/urban-trees-lets-grow-old-together. “Mature trees provide significant stormwater quantity and rate control benefits through soil storage, interception, and evapotranspiration.... Interception and evapotranspiration also decrease runoff volume with larger trees providing exponentially more benefit than smaller trees.”</p> <p>https://www.epa.gov/sites/production/files/2016-11/documents/final_stormwater_trees_technical_memo_508.pdf. “Most mature trees are not a renewable resource within our lifetime.” http://www.arborcareresources.com/Mature_Tree.htm. Killing mature trees and paving over/building on pervious land kills streams. We can't afford to lose more of our scarce natural resources and replace their important work with less effective, more expensive human-built replacements.</p>	6/21/2019 1:26 PM
104	<p>Some scientists say controlling erosion is only one facet of restoring a waterway. They say its benefits don't last if nothing else is done to reduce runoff from development before it pours into the stream. "You can't ask a stream to do everything an entire watershed should do," said Margaret A. Palmer, a University of Maryland scientist who's researched restoration ecology. She's published studies finding "no consistent evidence" that restored streams reduce nitrogen, another key pollutant fouling the bay. And while stabilizing stream channels may reduce erosion at first, she said, the benefit is likely to decrease over time. "Show me that the water quality is better after restoration than before," agreed Doyle, who's also published research questioning the ecological benefits of restoration. "In the vast majority of cases, the data do not exist."</p>	6/21/2019 9:41 AM
105	<p>Nature. The sound of the water when it flows. The park itself . What is that WEIRD enclosed area near the Sanctuary ? No info is ever sent to us as neighbors . The fact that we have animals and nature so close to the city is a gift. This park is magical to those of us who live here.</p>	6/21/2019 6:30 AM
106	<p>Open space, natural space, recreation (trails, parks)</p>	6/20/2019 6:51 PM
107	<p>N/a</p>	6/20/2019 5:06 PM
108	<p>The native plants and trees. There are many magnificent trees along Gulf Branch. It is really important to maintain the tree canopy, and care for mature trees and for the birds and small mammals that depends on the trees and ground cover.</p>	6/20/2019 4:16 PM
109	<p>Great respite from an increasingly urban area</p>	6/20/2019 11:21 AM
110	<p>The meadow area behind N Utah Street and 35th street (leading to the steps to the creek) is heavily used by the neighborhood all spring/fall/summer for neighborhood and civic association events.It's an extremely important community area</p>	6/20/2019 11:00 AM
111	<p>Natural areas without human constructed trails Areas for kids to explore The Nature Center</p>	6/19/2019 4:15 PM
112	<p>nature, trees, quiet passive uses, not playgrounds and ball fields</p>	6/19/2019 7:41 AM
113	<p>no</p>	6/12/2019 5:56 AM
114	<p>f</p>	6/11/2019 12:08 PM

Q9 Which of the following best describes how you use the park?

Answered: 114 Skipped: 62



ANSWER CHOICES	RESPONSES	
I am a neighbor of Gulf Branch park and stream	37.72%	43
I use the trails along the stream for walking/running	83.33%	95
I participate in nature center programs	39.47%	45
I use surrounding open space for play (Broyhill Forest Park, Sanctuary area, etc.)	23.68%	27
Other (please specify)	13.16%	15
Total Respondents: 114		

#	OTHER (PLEASE SPECIFY)	DATE
1	I like setting my hammock up and reading along the stream, too.	8/8/2019 5:35 AM
2	I live in south Arlington but love walking the trails and hills of Gulf Branch. My disabled wife enjoys the wildflowers in the spring around the Nature Center.	8/7/2019 4:17 AM
3	I believe that every city and suburb can so it's part to protect pieces of the natural environment and ecosystems.	8/6/2019 2:50 PM
4	arlington county resident concerned about destruction of stream valley environments and destruction of existing trails, bridges, etc.	7/25/2019 5:25 AM
5	i don't know this area	7/18/2019 9:28 AM
6	all of the above	7/17/2019 8:14 AM
7	my family uses the blacksmithing shop	7/17/2019 2:55 AM
8	I am a Arlington general master naturalist and also partake in maintenance activities, such as weeding, invasive pulls, and as a volunteer.	7/12/2019 11:50 AM
9	invasive plant removal	7/8/2019 10:47 AM
10	(Not an immediate neighbor, but the Park is a short walk from my house. I often take out-of-town visitors to the Nature Center and on down to the Potomac. They are always impressed.	6/26/2019 6:09 PM

Gulf Branch Stream Restoration Summer 2019 Feedback

11	My dog loves the area!	6/26/2019 3:57 PM
12	All of the above	6/26/2019 1:35 PM
13	Gulf Branch and its parks clean the air I breathe every day. They lower summertime highs and reduce the need for using air-conditioning. They absorb stormwater, reducing our reliance of less effective, human-designed stormwater management systems. They offer a respite from the noise, pollution, overcrowded conditions and general mayhem that makes life in an urban setting like Arlington absolutely miserable.	6/21/2019 1:26 PM
14	I was an early ' adopt a park' neighbor. We all want this park natural as possible with some love and care of the resources. I cannot attend the meeting due to travel . I'd welcome a call.	6/21/2019 6:30 AM
15	I use and value the parts of Donaldson Run that have not been downgraded with stream restoration	6/19/2019 7:41 AM

Pages 28-32, showing respondents' home addresses and email addresses, have been removed to protect privacy.