

# **DRAFT - Regional Grassroots Stormwater Stewardship Campaign**

## **2021 - 2023 MUNICIPAL STORMWATER GRANT OF REGIONAL OR STATEWIDE SIGNIFICANCE APPLICATION**

**Application #: WQSWGRS-2123-Spokane-00075**

*Offered by:*

Water Quality Program  
Washington State Department of Ecology  
Olympia, Washington

*Submitted by:*

City of Spokane

*in collaboration with regional municipal partners:*

City of Spokane Valley  
Spokane County

## Abstract

Stormwater occurrence, permitting, and subsequent management differ between Western Washington and Eastern Washington regions in many ways, but there are commonalities as well. Both regions have citizenry who have a deep regard for the environment and the resources afforded from the natural world. Also common between the regions are regulatory expectations that, in order to be achieved, require engagement with, and participation by the public. While Western Washington has developed strong stormwater networks among the municipalities, and fostered a culture of stormwater stewardship within the communities, Eastern Washington is still in its' adolescence with community stormwater investment and municipal cooperation. This is in part due to distances between communities, but also stems from gaps in the understanding of stormwater within the Eastern Washington citizenry that results in a lack of participation by the public. Eastern Washington has communities who desire to be stewards of the environment, who would benefit greatly if provided the information and tools that focus on the significant role stormwater plays. Grass roots community stormwater investment can be realized and sustained with a focused education and outreach campaign that aims to increase the understanding of stormwater within the general public, and foster networks that work to assist in the management of stormwater.

## Purpose

The purpose of the proposed Regional Grassroots Stormwater Stewardship Campaign is to provide information to the residents of the region that will ultimately establish community networks by developing a strong grass roots understanding on the fundamentals of stormwater management, and the function and importance of stormwater Best Management Practices (BMPs). The goal of the campaign is to develop a regional awareness of the opportunities for the community to participate in the management of stormwater that focuses on mitigation at the source, mechanics of the storage and treatment of stormwater, responsibilities of private and commercial property owners, and the benefits that stewardship will realize for the Spokane River and Spokane Valley-Rathdrum Prairie Aquifer.

## Background

The Spokane region, like many urban areas, is comprised of several municipalities. The three largest municipalities are City of Spokane, City of Spokane Valley, and Spokane County, where the cities are adjacent, and are encompassed by the county. Each of the three municipalities are permittees of the Eastern Washington Phase II Stormwater Permit. Each municipality generally manages stormwater in kind because of similar geographies, and as an artifact of like behaviors of the residents due in part to proximity and similar governance. Public education and outreach is essential for effective stormwater management in the Spokane region, and collaboration with the City of Spokane, City of Spokane Valley, Spokane County will enhance program outcomes.

The City of Spokane and Spokane County independently surveyed the respective public in 2019 in order to assess the level of stormwater understanding in the community. The City of Spokane provided an invitation to an online survey with the City's utility bill, and Spokane County mailed surveys directly to approximately 800 residences in the Spokane County Stormwater Service Area. There were approximately 1500 respondents to the City of Spokane online survey, and 209 respondents to the County survey. A subset of the results from the surveys are included as Attachment A. The information provided from the surveys illustrate that while a portion of the general public has a basic understanding of stormwater management and the function of stormwater BMPs, there is a significant portion who do not.

Each survey identified similar opportunities with respect to increasing public understanding of the criticality of appropriate stormwater treatment, and how stormwater is fundamentally managed. For example, forty-seven

percent (47%) of City of Spokane survey respondents were unsure of, or disagreed with, the statement that “*stormwater runoff was the number 1 urban water pollution problem in the state*” (Ecology publication #07-10-058). Similarly, only 28% of County survey respondents identify stormwater runoff as the single greatest contributor to regional water quality issues. Moreover, fifty-two percent (52%) of the City of Spokane respondents were unaware that the main function of a swale is to treat stormwater, and forty-one percent (41%) of County respondents are unsure where runoff ultimately discharges, or incorrectly believe that it goes to the local wastewater treatment facility.

Additionally, illicit discharge notifications made to the City of Spokane demonstrate that some members of the public feel that it is OK to use storm drains and catch basins to dispose of liquid wastes. This unfortunate information aligns with City of Spokane survey, which indicated that twenty-six percent (26%) of the respondents were uncertain, or disagreed, that anything other than stormwater entering storm drains was an illicit discharge. The survey data and illicit discharge information clearly indicate that there is a need to increase the regional community understanding on appropriate stewardship behaviors with respect to stormwater, specifically applicable source control measures and elimination requirements of illicit discharges.

Lastly, the surveys also identified the need to increase regional awareness on the maintenance responsibilities for some of the areas stormwater BMPs. The City of Spokane does not have the resources to maintain private swales, however, the City of Spokane survey showed that sixty-one percent (61%) of the respondents believe that it is solely the responsibility of the City to maintain all swales. In the County, where maintenance of ninety percent (90%) of the mapped stormwater swales in the Spokane County Stormwater Service Area is the responsibility of private property owners, it is necessary for property owners to be aware of the maintenance responsibilities and provided the informational aids to ensure appropriate stormwater treatment occurs.

There is a lack of understanding of the impacts of stormwater runoff, a gap in awareness of the swale maintenance responsibilities, and intentional misuse of stormwater infrastructure by some of the public occurs. Community understanding of the components and mechanisms of stormwater management, specifically source control, illicit discharge elimination, and applicable BMP maintenance is essential for effective water quality stewardship in the region. The proposed campaign will focus on the occurrence of stormwater pollutants, the mechanics of storage and treatment of stormwater, and the maintenance responsibilities of some of the public in order to develop a regional awareness of stormwater fundamentals that will foster a communal grassroots investment for adequate stormwater treatment.

### Audience

The target audience for the Regional Grassroots Stormwater Stewardship Campaign is the general public. However, as the messaging progresses it will have varying degrees of pertinence for different groups within the community. For instance, illicit discharge and source control messaging is typically applicable to every resident, but the mechanics of practice will differ dependent on specific groups (e.g. homeowner, business, etc.). Moreover, the fundamentals of swale function is pertinent to anyone within the permittees boundaries, but maintenance responsibilities will differ based on stormwater occurrence and property ownership. So, the general public is fundamental target audience, however more specific audiences will be addressed as the messaging progresses.

Additionally, there may be an opportunity to focus on underprivileged sector of the community. The region has experienced an influx of Eastern European immigrants who have made the Spokane area their home, and there may an opportunity to focus some education and outreach messaging toward immigrant owned

businesses in the construction industry. The campaign will assess the need and potential for effectiveness with messaging focused toward an Eastern European sector of the community by contacting the community leaders and discussing the potential to provide focused messaging to the Eastern European construction business community. If there is a potential for effectiveness, and the community leaders are in agreement, the campaign will target this Eastern European community within the messaging.

### Partnerships

The municipalities in the Spokane area have a history of partnering and supporting local government agencies and environmental advocacy groups. Specific to this campaign, the Spokane Regional Health District, Spokane River Forum, and Spokane Aquifer Joint Board will participate as members of the advisory committee to provide input during messaging development. Once developed, the Spokane Regional Health District and local environmental advocacy groups (i.e. Spokane River Forum, Spokane Aquifer Joint Board, Spokane Riverkeeper, and The Lands Council) will be engaged to partake in discussions to build upon and create community, municipality, local government, and advocacy group partnerships and networks.

### Available Shared Learnings

The City of Spokane Water Department has an ongoing water conservation and stewardship media campaign (Water Wise) that is realizing success in its goals to affect behavior change. Water Wise is principally focused on water conservation where it incentivizes participation in water use reductions, and provides messaging on the City's website and through social media. Additionally, Spokane River Forum and Spokane Aquifer Joint Board have championed successful multi-media campaigns focused on environmental awareness and stewardship in order to affect behavior changes in the community. The Water Wise, Spokane River Forum, and Spokane Aquifer Joint Board campaigns provide examples of successful outreach strategies, as well as lessons that have been learned in engaging the Spokane general public. The shared learnings from these campaigns are valuable resources that are available to the steering and advisory committees members of the proposed Regional Grassroots Stormwater Stewardship Campaign, and will be leveraged in during development of the outreach program.

### Messaging Strategies

The proposed Spokane Regional Grassroots Stormwater Stewardship Campaign education and outreach efforts will consist of several multi-media formats, to include municipal websites, social media, mobile signage, traditional marketing spaces, and radio.



The most significant component of the multi-media messaging campaign will be developing an approachable online presence, and using it to reach out to the general public to engage. In addition to creating appealing informational webpages on municipal websites, social media platforms will be used to post materials in order to capitalize on the networking opportunities social media provides. Educational and informational messaging will be posted regularly, therein branding the campaign, and stormwater videos will be created to supplement the postings and facilitate discussion. Messaging and videos will be managed and monitored on sites such as Facebook and Instagram, among others, in order to establish a community network with feedback loops for the regions residents. This will provide a vehicle for responsive engagement with the audience by the municipalities, and will also create a platform for communities to network amongst themselves and create a self-propagating atmosphere for stormwater stewardship.

A multi-media consulting vendor will be contracted to assist with establishing, managing, and monitoring the online presence, and assisting with the generation of marketing materials. Goals for the online messaging have been preliminarily established and will be amended with input from the steering committee, advisory committee, and a multi-media consultant.

Social Media Objective	Desired Result	Social Media Metric	Goal
Grow the campaign	Established awareness	Page Clicks, shares	50,000
Educate public	Increased knowledgebase	Video views, shares, comments	20,000

Cultivate advocates	Public engagement	Comments, likes, mentions	10,000
Build networks	Community investment	Follows, email sign ups	2,000
Sustain involvement	Fostered partnerships	Testimonials, increased engagement, social media sentiment, cross group memberships	1000

Online messaging will be supported by traditional marketing, specifically mobile signage, traditional ad spaces, and radio that aim to educate the viewer in concert with directing the viewer to the online networks. For example, mobile signage (i.e. vehicle decals) will be generated with imagery of best management practices and behaviors pertinent to the general public for the appropriate management of stormwater. The decals will include text that provides details that direct the viewer online, and will be installed on municipal vehicles and equipment (e.g. sewer camera vans, street sweepers, etc.). Additionally, advertising spaces (i.e. billboards, benches, etc.) will be purchased to provide messaging formatted similarly to that of the mobile signage, that is in alignment with the social media messaging. Lastly, radio air time will be purchased and audio advertisements will be created that align with the traditional ad spaces and online to perform the same function. The educational outreach marketing approaches proposed will provide pertinent stormwater awareness information to the general public that will reach a large regional audience. The information will increase the knowledgebase of stormwater fundamentals within the community, and empower community members to participate in the grass roots management of stormwater as local water quality stewards. Message content will be developed for the campaign in the committees using, among others, the following topics as starting points:

- Perform source control (lawn chemicals, paint storage, garbage bins, leaky cars)
- Dog poop (pick it up!)
- Only rain down the drain, no dumping (illicit discharges,)
- The value of swales (protecting the river and aquifer)
- Don't fill in swales with fill/bricks/gravel/cement...
- The functions of the components of a swale (inlet, storage area, outfall/drywell)
- How swales perform treatment (vegetation, soils)
- Responsibility of private property/ commercial businesses for managing stormwater onsite
- How to inspect a swale (inspection criteria)
- How to maintain a swale (clear inlets, vegetation maintenance, remove debris)
- Long-term financial benefits of swale maintenance and care
- Why a swale is often the better stormwater management choice as opposed to other BMPs.
- Legacy drywell status, what needs to be done
- Swale Modifications (size, type of cover, etc.)
- HOAs (operation and maintenance responsibilities)
- Preservation of Natural Location of Drainage systems
- Flood Plain awareness
- Plat language and stormwater

In addition to the online presence and marketing, printed brochures will be produced as an educational tool that will identify appropriate behaviors around green infrastructure, detail the functional examples of appropriate stormwater stewardship behaviors and components of a stormwater treatment BMP, and will also identify BMP inspection criteria. The handouts will be formatted in such a way that they will be usable field tools that identify the criteria for inspections, and examples of how to mitigate the inspection observations

through preventative maintenance. The brochures will serve as an educational messaging aid, but also serve as a usable field tool to empower the public to assess and maintain swales that are in their realm of responsibility. The printed materials messaging will include, among other topics:

- Examples of BMPs in need of maintenance
- “Do’s and Don’ts” with green infrastructure
- Suggested maintenance schedules
- BMP assessment/inspection checklists

### Deliverables

\*add details of deliverables

### Leveragable Materials

Materials developed during the proposed Spokane Regional Grassroots Stormwater Stewardship Campaign will be leveragable materials that will be made available to each of the twenty-four (24) Eastern Washington Phase II Municipal Stormwater permittees. The work products created by the Spokane Regional Grassroots Stormwater Stewardship Campaign will be developed so that the messaging of the materials will be pertinent and usable across Eastern Washington. Municipalities across Eastern Washington share similar geologies and weather processes, management approaches for stormwater. As such, messaging that is pertinent in the Spokane area will have components that are applicable to all Eastern Washington municipal permittees. The digital productions, marketing graphic templates, and printed handouts will be available to the members of the Eastern Washington Stormwater Group for municipalities that wish to leverage the materials into their stormwater program.

### Implementation

The campaign will be performed cooperatively by the City of Spokane, City of Spokane Valley, and Spokane County and implemented in each municipality. The City of Spokane will act as the Lead Entity and principal contact, where the other municipalities will equally support the effort by providing content and guidance to be clearly defined in memorandums of agreement.

An online presence will be established cooperatively by the three municipalities to provide messaging via social media posts of educational information and videos encouraging feedback from the community. The online presence will be established, managed, and monitored with the assistance of a contracted multi-media services vendor. The online efforts will be supported via traditional marketing that will educate and inform as well as direct the community to the online platforms. Implementation of the online presence and marketing materials will be performed in accordance with the schedule presented below.

In order to ensure effective implementation a Steering Committee and Advisory Board will be formed with personnel from each municipality in order to guide the messaging and align with each municipalities internal planning. The Steering Committee will consist of the following members:

\*add steering committee

The Advisory Committee will consist of the following members:

\*add advisory committee

Committee Member Bio's

\*add bios

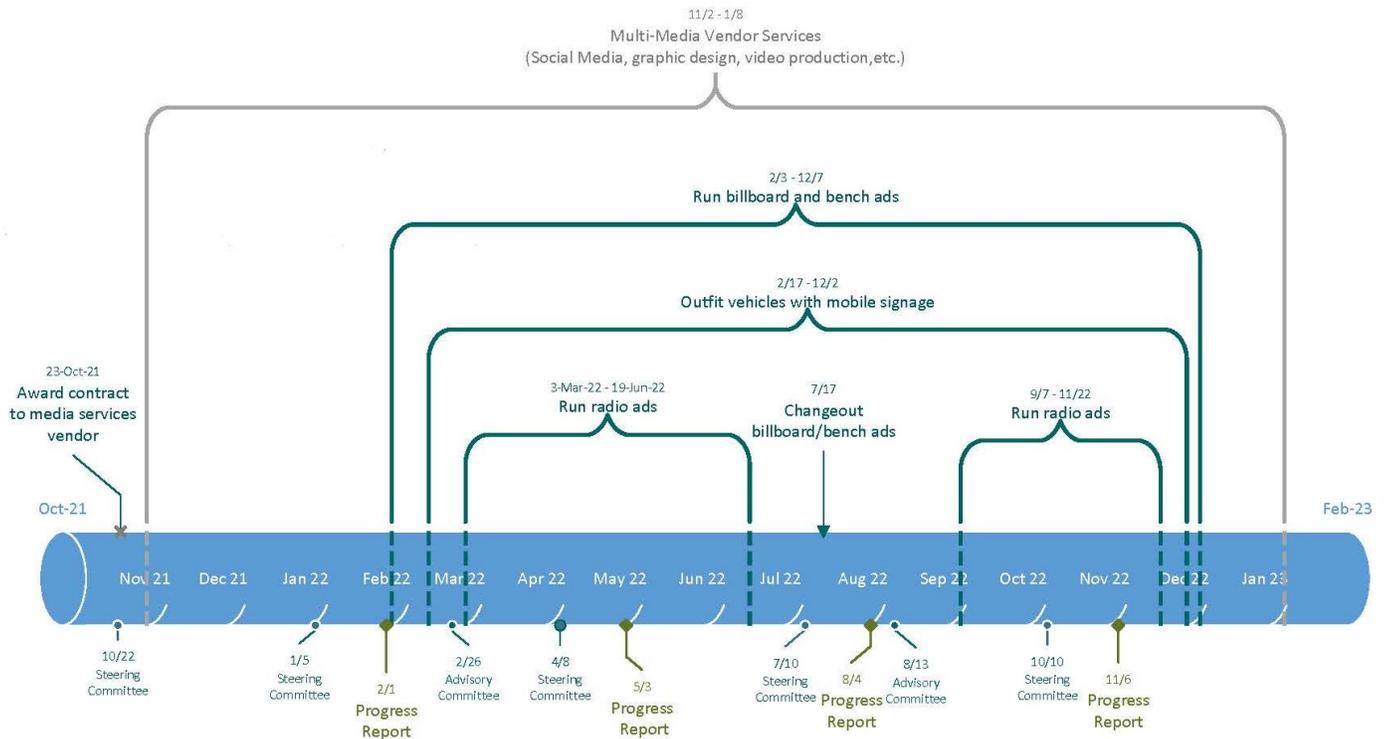
Estimated Costs

	Item	Cost	Quantity	Item Total	
<b>Multi Media Consultant</b>	*Managing social media pages (post, monitor metrics, report trends)	\$/week	60		
	Develop Messaging	\$/week			
	Facebook advertising	\$/week	60		
	Instagram advertising	\$/week	60		
	Video Production	\$/ea	4		
	Radio Ad production	\$/ea	2		
	Graphic Designs	\$/ea	5		
	Subtotal				
<b>Marketing</b>	Bulletin Boards Vinyl (10'x30')	\$450/bulletin	6	\$5,400	
	Run Ad space	\$280/mo	3	\$8,400	
	Subtotal				\$13,800
	Benchs Vinyl	\$35/bench	40	\$2,800	
	Run Ad space	\$55/mo	20	\$11,000	
	Subtotal				\$13,800
	Run Radio Ads	\$22/ad	156	\$3,432	
	Subtotal				\$3,432
	Vehicle Decals	\$600/vehicle	6	\$3,600	
	Subtotal				\$3,600
	<b>Printed materials</b>	Tri-fold brochures	\$1.50/ea	2000	\$3,000
		Assessment forms	\$1.50/ea	1000	\$1,500
Subtotal				\$4,500	
<b>Total</b>				<b>\$39,132</b>	

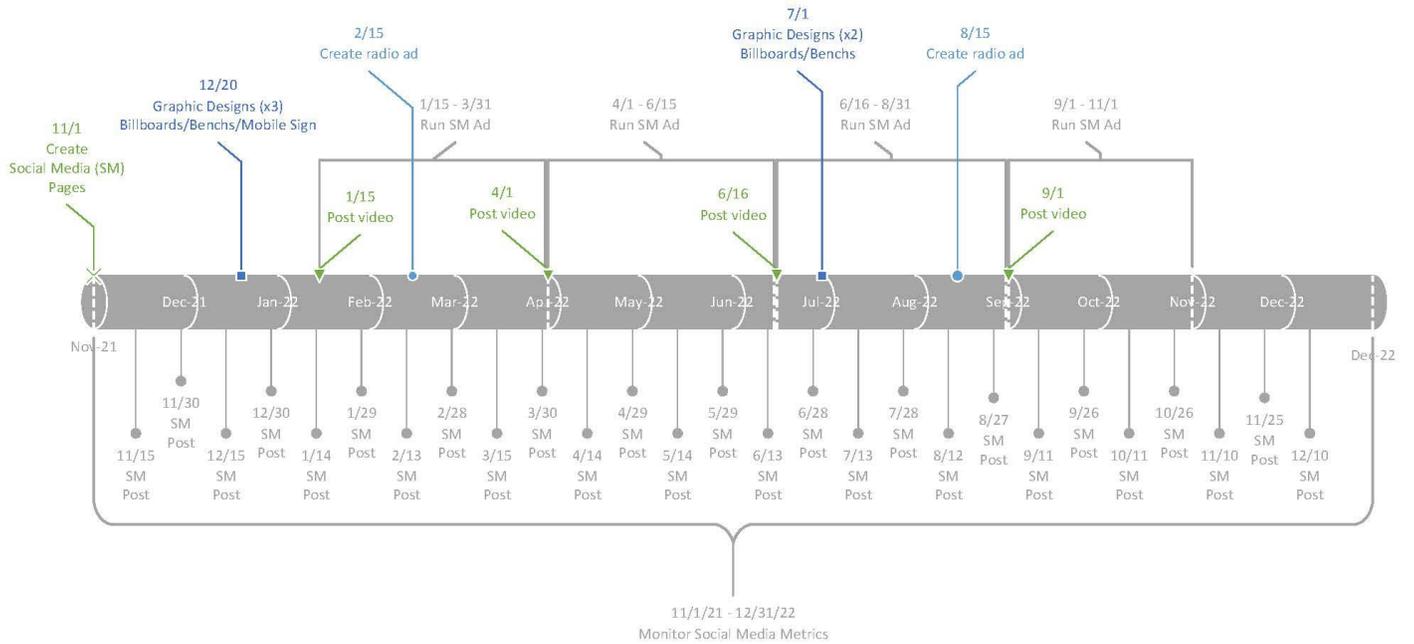
\*City will engage public and respond to feedback

Implementation Schedule

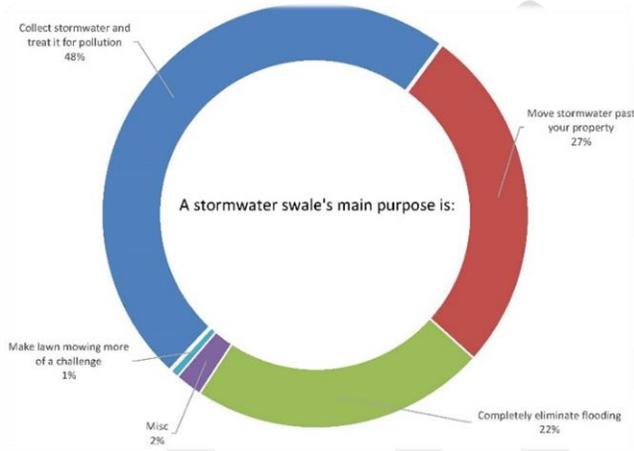
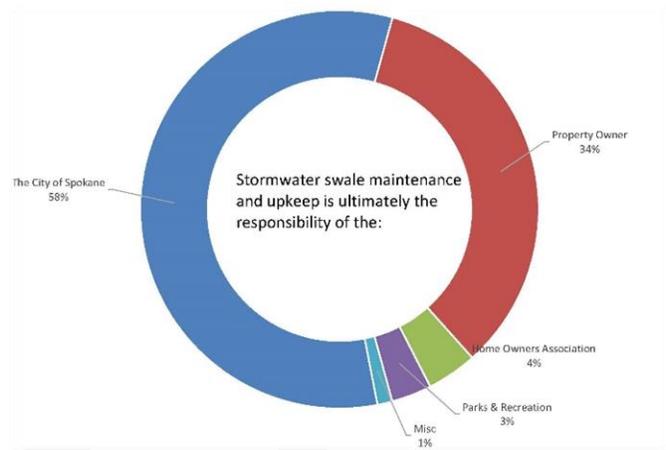
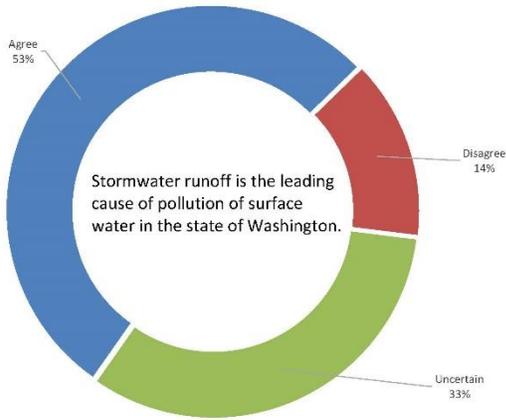
## Schedule Overview



## Multi-media Vendor Services Schedule

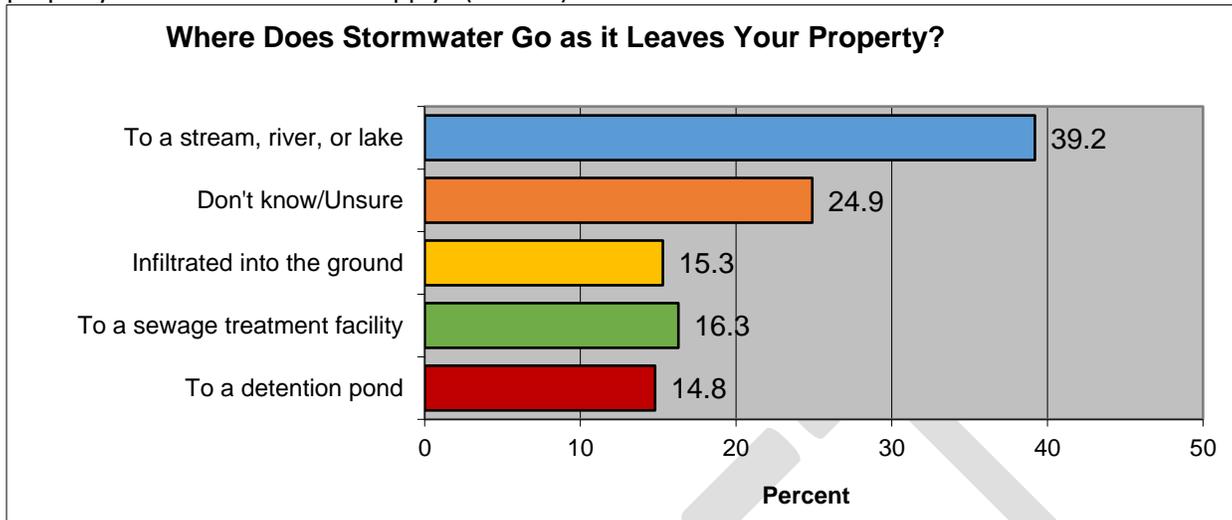


# Attachment A



## Attachment B

After it rains or when snow melts, where do you think the resulting stormwater runoff ends up after it leaves your property? Please select all that apply. (n = 209)



source: Spokane County Stormwater Awareness Survey, 2019