



CITY COUNCIL

AGENDA BILL # AB22-0029

City of Algona
200 Washington Blvd.
Algona, WA 98001

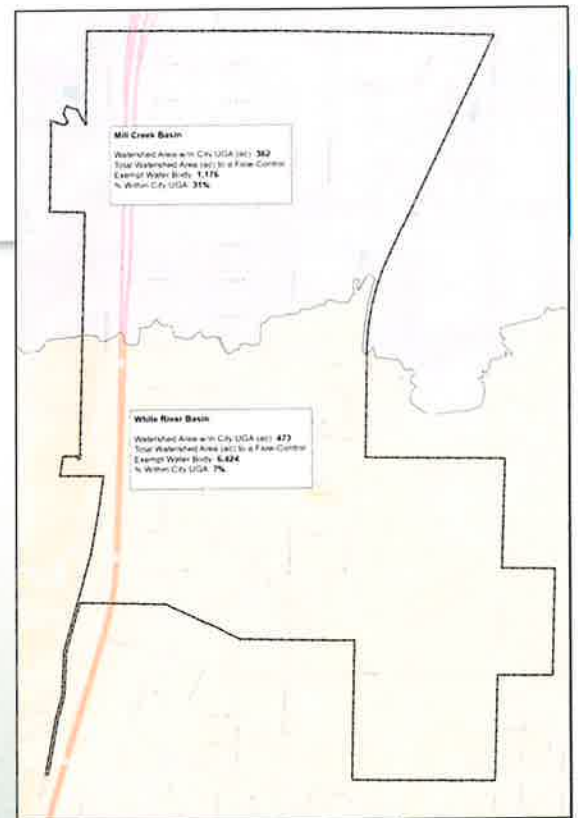
ITEM INFORMATION			
SUBJECT: Stormwater Management Action Plan (SMAP)	Agenda Date: June 13th, 2022		
	Department/Committee/Individual	Created	Reviewed
	Mayor		
	City Administrator		X
	City Attorney		
	City Clerk		X
	Finance Dept		
	PW/Utilities		
	Planning Dept		
	Community Services		
	Police Dept		
	Finance Committee		
Planning Commission		X	
Civil Service Committee			
Staff Contact: Jessica Griess, City Clerk Treasurer; Stacey Clear, Gray and Osborn			
Attachments: SMAP Powerpoint			
<p>SUMMARY STATEMENT:</p> <p>Stacey Clear will be presenting on the Stormwater Management Action Plan (SMAP). This is required per the NPDES Phase II Stormwater permit. The SMAP includes delineating watersheds, analyzing water quality, prioritizing a watershed, and picking a subbasin within the priority water shed. Mill Creek Basin has been selected as the priority watershed and the next step is to choose a subbasin.</p>			
COMMITTEE REVIEW AND RECOMMENDATION:			
RECOMMENDED ACTION:			
RECORD OF COUNCIL ACTION			
<i>Meeting Date:</i>	<i>Action:</i>	<i>Vote:</i>	

Stormwater Management Action plan (SMAP)

May 23, 2022

Background

- City is required to do a Stormwater Management Action Plan (SMAP) per the NPDES Phase II Stormwater Permit - Focus on Water Quality
- SMAP involves:
 - Delineating watersheds
 - Analyzing water quality data in these watersheds
 - Prioritizing a watershed
 - Picking a subbasin within the priority watershed to focus on for water quality measures



Watershed Prioritization - Overview

Watershed Prioritization based on:

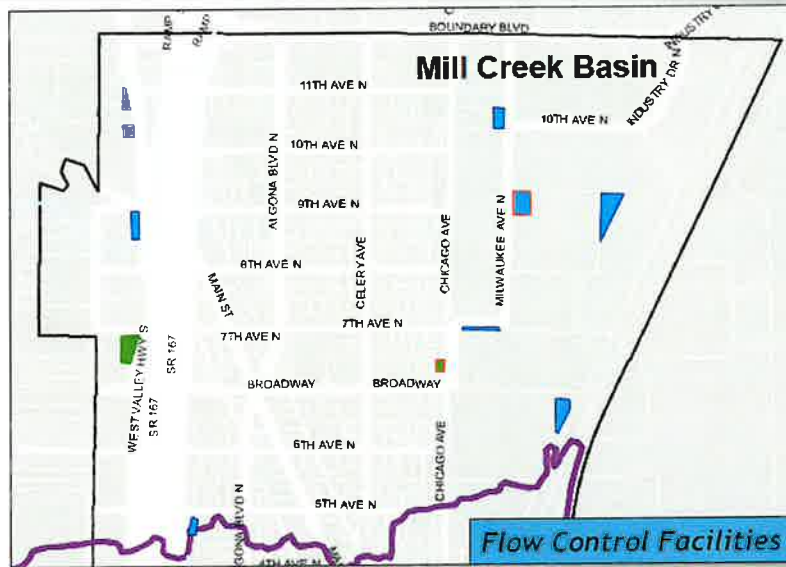
- Fish Habitat
- Flow
- Water Quality
- Land Use
- Environmental Justice



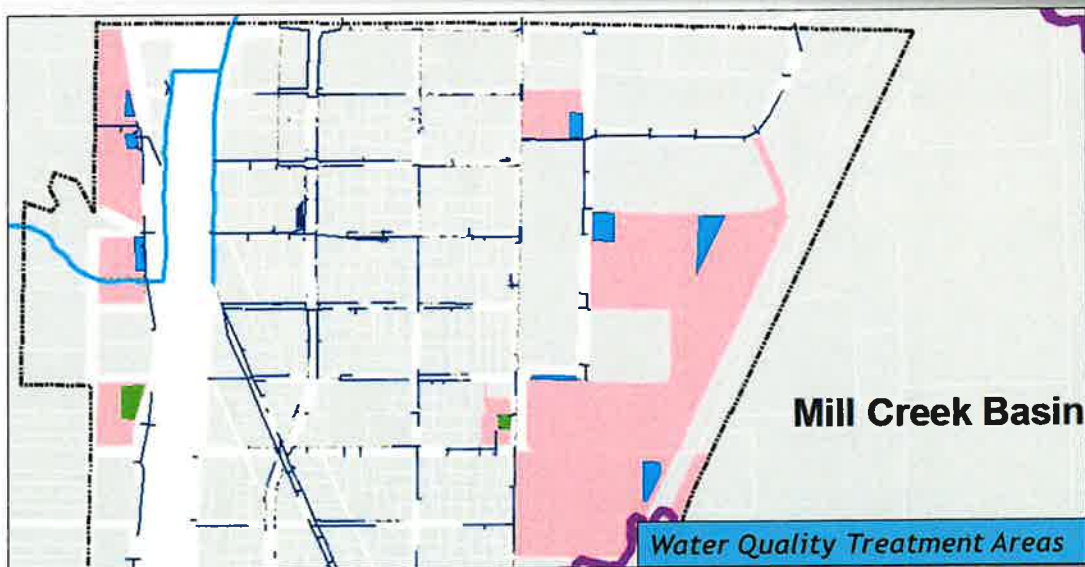
Watershed Prioritization - Fish Habitat



Watershed Prioritization - Flow



Watershed Prioritization - Water Quality



Watershed Prioritization - Land Use



Watershed Prioritization - Environmental Justice



Watershed Prioritization - Matrix

	Mill Creek Basin (ac)	White River Basin (ac)
	Relative Condition ⁽¹⁾	
Watershed Area within City UGA (ac)	362	473
Total Watershed Area (ac) to a Flow-Control Exempt Water Body	1,176	6,424
% within City UGA	31%	7%
General Description	Topography is from south to north with runoff flowing to Mill Creek (which has a TMDL for DO, fecal coliform, temperature, and copper) and then the Green River. Land use includes ~50% residential and ~50% industrial. Minimal amounts of flow control and water quality facilities exist.	Topography is from north to south with runoff flowing to the Boeing Ditch (which has a TMDL for DHT and pH) or to a ditch along the east side of SR 167 and eventually to the White River. Land use includes minor industrial and mostly residential. Very few flow control and water quality facilities exist.
Fish		
Fish Barriers	2	1
Fish Habitat – Stream Typing	2	2
Fish Habitat – Puget Sound Habitat Characterization	2	1
Stream Vegetation Buffer	2	1
B-IBI	1	--
Flow		
Existing Flow Control Facilities	1	2
Flow Control – Puget Sound Habitat Characterization	2	2

Watershed Prioritization - Matrix

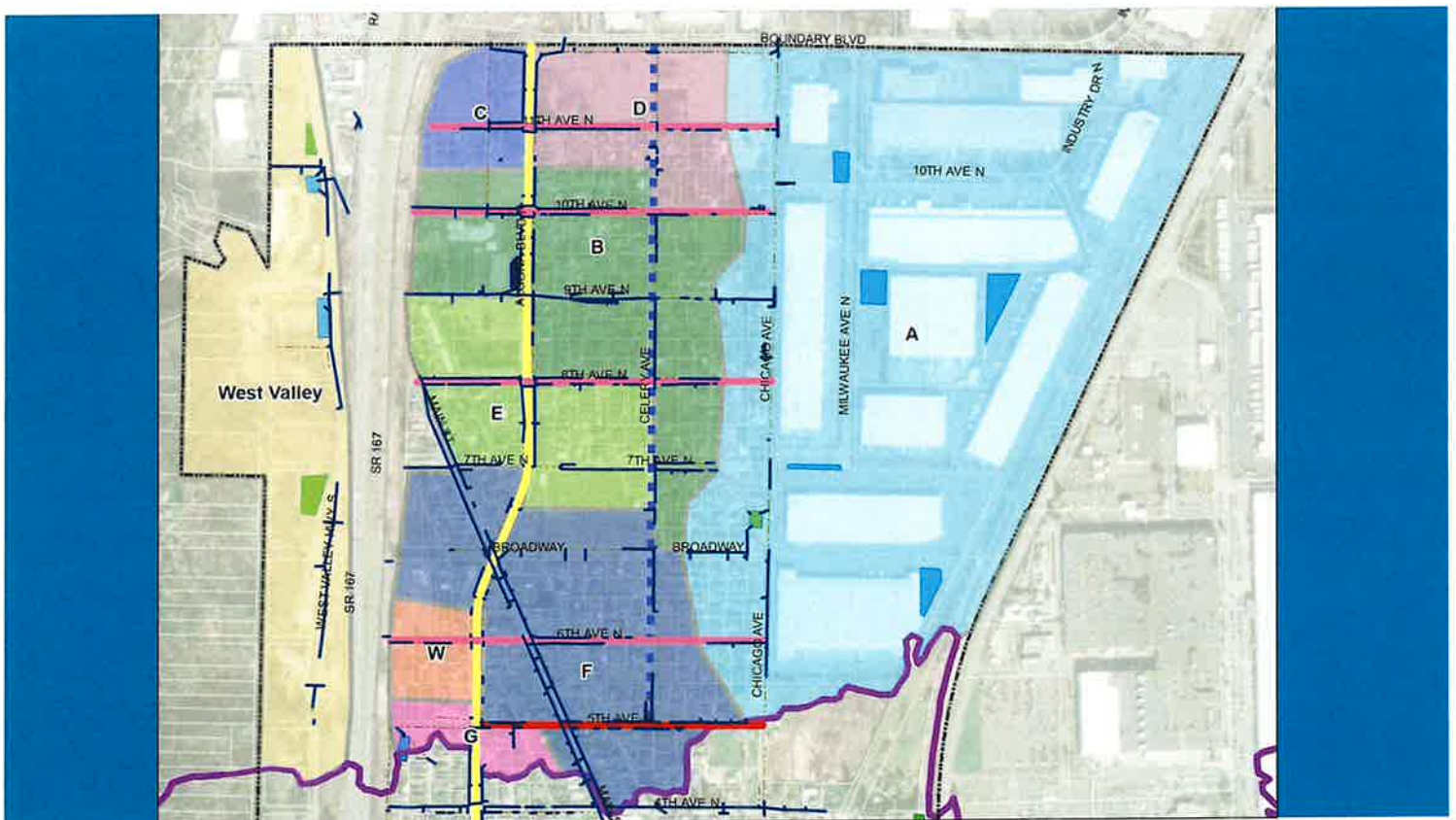
	Mill Creek Basin (ac)	White River Basin (ac)
	Relative Condition ⁽¹⁾	
Water Quality		
Existing Water Quality Treatment	1	2
Water Quality – Puget Sound Habitat Characterization	2	2
303d Listing Parameters	2	2
Land Use		
Existing Land Use	2	1
Future Development	2	1
Environmental Justice		
Demographic	2	2
Wage Divide	1	2
Total Score	24	21

(1) A score of 1 represents the relative best condition compared to a score of 2 which is the relative worst condition of each of the two basins.

Mill Creek Basin = Priority Watershed

Next Step - Choose a Subbasin

- Goals
- Selection Process (things to think about)
 - Potential future projects/policies
 - Upcoming required actions
- Next Steps
- Subbasin Discussion



Subbasin Selection - Goals

Protect

Change land use to preserve an area

Restore

Retrofit an area to provide water quality treatment

- Structural Means
- Non-Structural Means

Subbasin Selection - Potential Actions

Non-Structural (Policies/Activities):

- Require “enhanced” treatment in the subbasin by developers
- Public education
- More frequent illicit discharge/spill inspections (*i.e. catch basin inspections*)
- Prioritize inspections of businesses for their stormwater practices
- Prioritize maintenance of city owned stormwater facilities
- Prioritize street sweeping / catch basin cleaning



Subbasin Selection - Potential Actions

Structural:

- Retrofit existing flow control/water quality facility (detention pond)
- Install new facility (proprietary, maybe w/ future road/utility projects)
- Bioretention/permeable pavement (not usually feasible in Algona due to high groundwater)
- Modify ditches/biofiltration swales
- 'Road diet' - reduce impervious surfaces
- Install tree canopy over stream
- Also includes property acquisition for future facilities



Subbasin Selection - What's Coming

- Besides SMAP, City will also be required to do "Structural Stormwater Controls" (*Projects that reduce pollutants or affect hydrology downstream*)
- Counties/Large Cities doing these now
- Beginning 2024 (*next NPDES Ph. II Permit cycle*)
- Possibly choose subbasin knowing that these types of projects will be coming
- Each project = points; City needs X amount of points in the permit cycle

Subbasin Selection - What's Coming

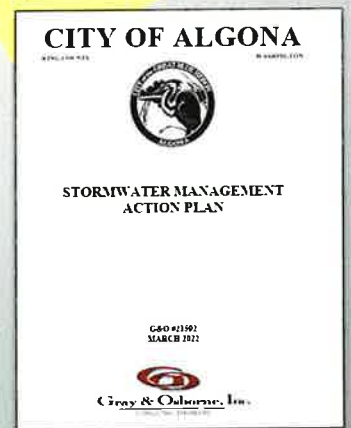
Current Relative Structural Stormwater Controls Point System: *(subject to change)*

	Points		Points
New/Retrofit flow control facility (<i>detention</i>)	1.0	Restoration of riparian buffer	0.35
<i>In a known flooded area</i>	1.5	Restoration of forest cover	0.25
New/Retrofit water quality facility	1.0	Floodplain reconnection	0.10
<i>In a known water quality problem area</i>	1.5	Permanent removal of impervious surface	1.0
<i>WQ provides enhanced/phosphorus treatment</i>	2.0		
<i>Meets WQ standards (not just a retrofit project)</i>	2.5		
Low Impact Development (LID) (<i>i.e. rain garden</i>)	4.5		
Property acquisition	0.5		
Maintenance (<i>>\$25k, miles swept or pipes cleaned</i>)	0.25		

- Points get multiplied by area served
- Currently counties/large cities have to collect 300 points (up to 75 (or 25%) can be maintenance related)

Subbasin Selection - Next Steps

- Recap
 1. Chose Mill Creek Watershed
 2. Talked goals for subbasin (*protect or restore*)
 3. Discussed possible future project types (*structural / non-structural*)
 4. Time to pick a subbasin
- By June 30th, only need to choose a subbasin (not projects) (*per permit*)
- Allow other interested parties (*Tribes, Public, Neighboring jurisdictions, etc.*) to comment on selected subbasin.
- By March 2023, SMAP written to include subbasin, projects, costs, schedule and implementation plan.



Subbasin Selection - Next steps



- Recommend selecting flow control/water quality projects that will meet the future permit (*structural stormwater control projects*)
 - Detention pond/vault
 - Proprietary WQ vault/filter
 - Retrofit ditches
- Projects selected will likely need to be constructed (*In 2024+*)
 - Set realistic budget (*possible Ecology grants*)
 - Realize realistic construction opportunities
- Combine w/ future road/utility projects?

Subbasin Discussion



Subbasin Selection Discussion:
Potential Projects

